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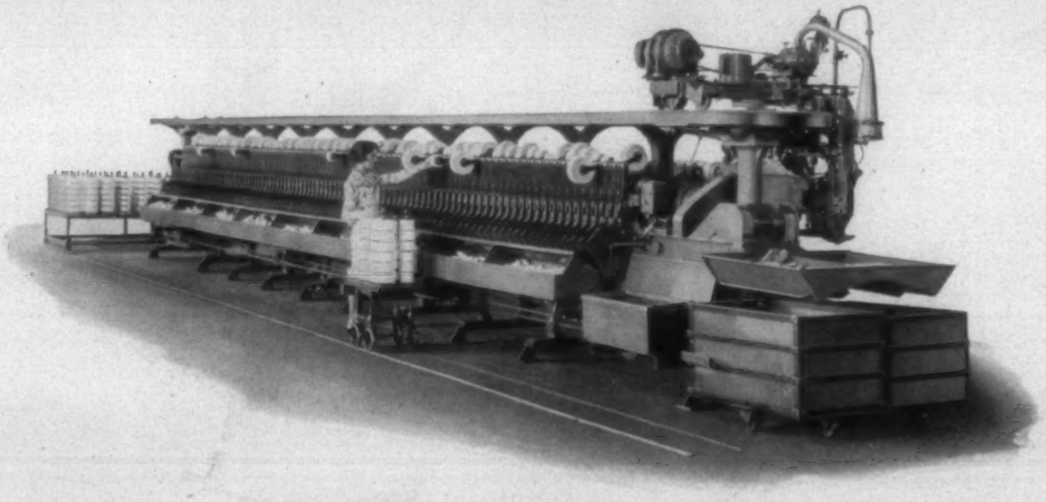

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The breaking strength of their yarn was increased 5 per cent and was much more Even.

In other words, the mill is now in a position to Stay with the Market. They have Something To Bite On, while waiting for the More Abundant Life to gelatin, which doesn't make them Too Unhappy. . . .

And as every good story must have a Moral, but without personal reflections on our very good friends who could See a Good Thing, here it is: . . . .

"They said it couldn't be done; but he, poor fool, didn't know it, so he went ahead and did it."

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"Stretch-Out" Report Exonerates Mills

The great majority of cotton mills have not subjected their employees to excessive work loads, it is shown in the report of the Textile Work Assignment Board, filed in Washington at the week-end.

The report practically refutes charges by the textile union that the mills are guilty of excessive "stretch-out" practices. It states that a few employers "through ignorance or otherwise have set up machine assignments that may create excessive work loads on some jobs" and recommends the appointment by the President of a National Board to regulate excessive loads where they do exist.

An important part of the report takes the position that the stretch-out problem is purely a local one and that it is impracticable to set up machine loads in terms of the number of machines attended.

After investigating complaints alleging excessive increases of machine assignments in 35 mills and after studying machine assignments and work loads "in representative mills in the cotton textile industry," the board makes these findings:

"1. The board is convinced that the great majority of employers in the cotton textile industry have not set up machine assignments that create excessive work loads for the employees.

"2. The board is convinced that, through ignorance or otherwise, there are some few employers in the cotton textile industry who have set up machine assignments that may create excessive work loads on some jobs.

"3. The board is convinced that, while there are some existing excessive machine assignments and work loads, there are also some existing deficient machine assignments and work loads.

"4. The board is convinced that it would be unwise and impracticable to attempt to set up standards of machine assignments in the cotton textile industry, expressed in the number of machines to be tended."

The members of the Textile Work Assignment Board making the report were W. A. Mitchell, chairman, Geoffrey C. Brown, employees' representative; Earle R. Stall, employers' representative. The board has been making a serious study of the stretch-out for a period of four months.

The board began its report to President Roosevelt. The President referred it to his Cabinet committee studying conditions in the textile industry, by telling of the adoption of scientific management and specified methods in addition to improved machinery following the World War.

"Better equipment and improved methods throughout this country's industrial progress have resulted in increased production per operative, improved quality, lower costs, wider markets and increased consumption. And along with this has come better wages, shorter working hours and higher standards of living," the report reads. Specialization has enabled workers to accomplish more and earn more by reason of skilled operatives being on the more skilled tasks, with their simpler duties being passed on to the less skilled workers. Proper reallocation of work tasks has been brought about through improved machinery and manufacturing conditions and as a part of better management and methods, enabling more production per machine or per operative. The principle is not new, therefore, and has been going on during the whole industrial progress of this country."

Specialization in Industry

"Much progress has been made in the textile industry during the last few years, both in machinery and more recently in methods. Mechanical progress has increased the efficiency of many machines. They are better made, simpler and easier to operate and an operative can look after more without increased effort. Methods of manufacturing, likewise, have been improved by using better raw materials, producing stronger yarns, effecting more favorable working conditions and removing from the skilled worker the simpler duties and turning them over to less skilled persons. Properly done, this simply means that less time is required per operative per machine and enables handling of more machines with no more work effort.

"The specialization system, which has been called the "stretch-out," is not confined to weaving but is applicable to many of the other processes in textile plants. However, it has been more widely used in loom operation and its workings in a cotton mill may be illustrated by the following example.

"The practice formerly was that a weaver handled a small number of looms and performed practically all the operations involved. In many cases he was supplied with poor yarns, resulting in excessive yarn breakage and excessive loom stoppage, and as a consequence was pressed to tend even small number of looms. Under the specialization system, however, the simpler but time-taking duties are delegated to others and the weaver's entire attention is given to re-tieing broken yarn, starting the loom and repairing defects which would cause imperfections in the

(*Continued on Page 22*)

Spinning Discussed at Clemson Meeting

THE first meeting of the South Carolina Spinners' Division of the Southern Textile Association, held Saturday, May 11th, at Clemson, S. C., proved very interesting. The discussion on the various questions on spinning brought out a great deal of interesting information.

Joe C. Cobb, superintendent of the Aiken Mills, Langley, S. C., and a former secretary of the Association, acted as chairman, and did excellent work in leading the discussion.

The group was welcomed to Clemson by Dr. E. W. Sikes, president of the college, and after his remarks the remainder of the time was devoted to the technical discussion. The report of the discussion follows:

CORK ROLLS

Chairman Cobb: The first question reads: *"Please give us full information as to your experience on cork rolls in spinning, as to evenness and breaking strength. Is the yarn more fuzzy?"*

Newton G. Hardie, Supt., Inman Mill, Inman, S. C.: I have run cork rolls several times and am running them now in the card room. I am making a test now in the spinning room. Our trouble has always been that we had more ends down in the spinning room than we did on calf-skin or sheepskin. I am here to get some information on that.

Mr. Day, Cowpens, S. C.: We find we got quite a few more ends down on cork. We had more even yarn on the calfskin, and better breaking strength.

P. E. Strickland, Overseer Spinning, Anderson Mills, Anderson, S. C.: I have had some experience with cork rolls and found I had more ends down, just like the other gentlemen.

Chairman: Was your yarn more fuzzy?

Mr. Strickland: It had what I call whiskers on it.

T. J. Willis, Greenwood Mill, Greenwood, S. C.: We have something like 60,000 spindles on cork rolls, and are getting very good results. I can not give you any comparison between cork and leather, because I do not know what the leather rolls did. We get an average of 35 per thousand end breakage.

Chairman: Did you turn the arbor down on your rolls before you covered them with cork?

Mr. Willis: Just left them as they were.

Question: What staple cotton are you using?

Mr. Willis: One-inch middling Western cotton.

Mr. Purvis: We have been running some spindles on cork for two and a half years. We still have a few frames on leather, for comparison. We can not find any difference whatsoever in the breaking strength or the ends down. We do find that we have more cleaning to do with cork, because the cotton seems to shed all the rolls. The biggest advantage we find is in the cost, which is about 40 per cent less.

Robert W. Phillip, Editor, *Cotton*, Atlanta, Ga.: Did you turn the ends down?

Mr. Purvis: We turned some down and some we did not turn down. It is a little better, particularly because we haven't any trouble on Monday mornings.

John S. Lockman, Overseer Spinning, Monarch Mills, Lockhart, S. C.: Did you make any difference in the hank roving when you went on cork?

Mr. Purvis: No, we didn't make any difference. Well, it might have been just a point or two. We tried to run on the same frame, half the frame on leather and half on cork, to see if there was any difference in the weight, and we did find a slight variation. I think the cork was a little lighter, due to the drafting quality.

John S. Lockman: Do you get as much clearer waste on your cork roll as on leather?

Mr. Purvis: No, sir, get less.

Question: Is it long-draft spinning or regular draft?

Mr. Purvis: It was regular until a few weeks ago, when we changed to long draft.

Prof. H. H. Willis, Dean, Textile School, Clemson College, S. C.: Some time ago I ran a test here on 20s yarn. As a result of that test there was no appreciable difference in the end breakage on the spinning in the two types of rolls. The strength of the yarn was slightly better.

LITTLE DIFFERENCE IN YARN

As to making the yarn a little lighter, I have run cork and leather on the same frame over a number of spindles at the same time and found no appreciable difference. You can take twenty-five bobbins off a side, either leather or cork, and you will frequently find, if you test that yarn from top to bottom, as much as 4 to 6 per cent difference in either the strength or the size of those particular bobbins. So, in making a test, I would say it would be necessary to test the yarn on as much as 50 to 100 spindles in order to get a reliable test.

John S. Lockman: Did you ever measure off a certain number of yards of roving and run it through the cork and run it through the leather and see which one ran it out first?

Mr. Purvis: We did that and found that both ran it out at the same time. However, we had more yarn on the bobbin with the cork than with the leather, showing that there is a little more draft there.

John S. Lockman: Is there any difference in starting up on Monday morning if you have cork?

T .L. Brannan, Overseer Carding and Spinning, Aiken Mills, Langley, S. C.: Yes, sir, on Monday morning we have quite a lot of trouble with lapping up, especially if it has rained over the week-end. I notice more fly on the cork rolls than I do on the leather rolls, but so for as difference in the running is concerned, I don't notice any.

Chairman: Do you have more lint on the top clearer with cork?

Mr. Brannan: No, sir, I do not. But I think that is due to the roll being rougher, and that lint is flying about the room and under the machine.

John S. Lockman: Don't you find your clearer cleaner?

Mr. Brannan: Yes.

John S. Lockman: Well, that must go in the yarn, then.

Mr. Brannan: Well, it goes somewhere.

LIFE OF CORK ROLLS

Chairman: We will take up the next question: *"Do you have any method for predetermining the life of the cork roll, that is, the length of time that it should run before rebuffing?"*

F. W. Waldrop, Overseer Spinning, Drayton Mill, Spartanburg, S. C.: We have two frames on cork rolls that have been running over two years. My report would be just about along the lines of the general discussion that you have all heard. I do not notice any appreciable difference in breaking strength or in ends down, but the most important thing that we have noticed is the life of these rolls. They have been running over two years, on various numbers, with various twists. As a matter of fact, I ran one frame six months on a mixture of good cotton and waste, then changed that frame to 80s and ran 80s and 90s, and the rolls are still running. As to how much longer they are going to last, I do not know.

Chairman: Have you ever had been rebuffed?

Mr. Waldrop: No, sir. I don't think you can get a reliable test on two frames, but the rolls are still running.

L. E. Wofford, Night Supt., Inman Mills, Inman, S. C.: I want to ask the card-room men that have them on intermediate speeders if they run as well as leather rolls on the intermediate speeders.

R. T. Stutts, Overseer Carding, Monarch Mills, Lockhart, S. C.: My experience with cork rolls in the mill is that they do not run as well in the card room. Now, on cork rolls we have very little eyebrow, and I think that waste must go into the yarn. It is bad practice, if you have both cork and leather rolls, to have them both in the same room, because it will give you a very uneven draft.

Mr. Burns, Cowpens: I find that I can not run cork without buffing it every three months, and it really ought to be buffed oftener than that, to give perfect work. They will never give perfect work, but it will give more satisfaction if you have it buffed. I can not get as even work out of cork as I do out of sheepskin or calfskin.

W. O. McElrath, Overseer Carding, Appleton Company, Anderson, S. C.: I have tried some cork rolls. You know, the front speeder roll is 1⅛ inches, that is standard; and I find the greatest trouble is that the cork roll is just as big as the speeder roll. If the diameter of the cork roll could be pulled down it might be better, but I prefer the calfskin.

Member: I should like to ask Mr. Willis what method he uses for determining evenness, and whether he is using the standard length of 12 yards, or whether he just looks at the work, or what method he uses for determining the evenness?

Question: What type of machine are you using?

Mr. Willis: Using a standard yarn tester.

John S. Lockman: Do you use humidity in the breaking room?

Mr. Willis: The machine we break with is in the spooler room. I have no way of telling how much moisture is in the cotton. We take the yarn direct from the spinning room to the breaking room and break it.

Mr. Wofford: Is that breaking strength of 60 pounds on 21s yarn an average for six months or a year?

Mr. Willis: No, sir, not an average for six months. That is a test that I have run on the average for the past two months. It will average that.

Question: What twist multiple?

Mr. Willis: 4.73. We have new frames with long draft.

W. P. Leister, Supt., Victor-Monaghan Mill, Walhalla, S. C.: Have you tested your breaking machine—the machine that you use to break this yarn on?

Mr. Willis: No, sir, I have not. As to the accuracy of the machine, all I have to go by is whether it came there all right or not.

Chairman: We checked our machine and found a change there; our pointer had gotten off. We found our breaking strength had gone down, and so we checked everything in the room.

Question: How do you check a breaking machine?

Mr. B.: Test it in the same way as you test a pair of scales.

Mr. C.: It might save a lot of discussion, when we say we are breaking at 50 pounds or 60 pounds, if we say something about the cotton. One mill may be supposed to run inch cotton all during the year. The breaking strength may jump up from 50 pounds to 60 pounds, or it may drop down. Well, it is the cotton that causes that.

BREAKING STRENGTH

Mr. Brannan: There are a lot of things that enter into breaking strength. You have to have good opening and picking and carding and drawing. If your breaking strength has not been set before you get to the spinning room, then you have not much chance of getting any.

T. J. Willis: If one mill use some statistical measure for measuring the evenness of yarn, you will notice the more uneven your yarn number is—that is, just take what is called an average deviation; if that figure goes above 2½ per cent, your yarn break will come down a good bit. You have to keep those figures within reasonable range; if you do not, your breaking strength will come down considerably.

Question: Just how do you get at that?

Mr. Willis: That is quitte a long story, not so complicated, but it takes a long time to go into it, and I can not tell it from memory.

Chairman: We will go on to Question No. 2: *"If running a 15/16 diameter cork roll in the front line, and the breaking strength is equal to that with sheepskin rolls, what effect will it have on the breaking strength to put in a 1 1/16 diameter cork roll in the front line and a ⅞ diameter roll in the middle line?"*

C. C. Roberts, Overseer Carding, No. 4 Mill, Pelzer Mfg. Co., Pelzer, S. C.: I would not think there would be any.

Chairman: Mr. Willis, can you give us a report from Mr. Gary of Seneca on that?

T. J. Willis: He said that theoretically you should get a better yarn, but practically you do not get it that way, that it does not make any difference. He has tried different sizes of rolls, from ⅞-inch up, different sizes of steel rolls and different sizes of leather rolls, and so far as he could tell there is no difference in the breaking strength.

John S. Lockman: I had a cork man with me for three or four weeks; he stayed there and made his own tests. We ran 1 1/16-inch rolls, ran ⅞-inch rolls, ran everything that could be run in cork, I think. I have his own figures that he made out; it would take about a day to read them all, I guess. In every test that we made the cork showed a lighter yarn than sheepskin, with every different size of roll. This was on 41s, supposed to be 41s filling. The theory is that if you put on a bigger roll you have to spread your rolls. We had to spread the rolls to put in the big rolls, and we got a weaker yarn. In every test that we made we got a weaker yarn, a lighter yarn from cork rolls than from sheepskin.

LIFE OF SHEEPSKIN ROLLS

Chairman: Let's go on to the next question: *"What is the life of a sheepskin roll in the front line? What is the life of 15/16 diameter cork rolls in the front line?*

What is the life of 1 1/16 *diameter cork rolls in the front line?*

A. L. Ellis, Overseer Spinning, Pelzer Mfg. Co., Pelzer, S. C.: My experience is that our front rolls, regular 15/16 diameter, regular leather-covered rolls, last about four months on two shifts a week, 40-hour shift. We had well over half of our work on cork rolls once but are going back now to leather, gradually. My experience with the cork rolls, 1 1/16-inch, is that they will last about twenty months on the same running time, buffing them about every four months on the double shift. We found that the cost of the leather-covered roll, as best I could get it, is about 2½ cents, you might say, for the two-shell roll. That is for four months, and for the twenty months 12½ cents. For the cork it is 10 cents. So we find that the cork is about 25 per cent cheaper in material, but that does not take into consideration the cost of recovering leather rollers or rebuffing cork rolls. It is cheaper to rebuff cork rolls than to re-cover leather rolls, so that would add some more to the saving of the cork roll. We find that the cork roll does not give as good results as the leather roll. We made many tests. We found the cork rolls average almost two ends down to one on the leather rolls. So we are gradually replacing the cork rolls with leather rolls.

T. G. Roche, Pelzer Mfg. Co., Pelzer, S. C.: I have worked with Mr. Ellis on that. We found the breaking strength a little lighter and the number of ends down is considerably more per hour.

CORK ROLLS AND CLEANING

Chairman: Next question: *"After going on to cork rolls in your entire mill, did you change your cleaning schedule? Did you have to do more or less cleaning?"*

Mr. Edwards: We did not change our cleaning schedule, but or machines are not quite as clean. The rolls get very dirty. I find quite a lot of waste flies down in the back guards. Quite a lot of it evidently goes into the work. We have some long draft and some regular draft. We are not running any cork rolls now on long draft. We did have some on 40s filling but changed back to leather.

Chairman: I may say that in one plant I was connected with some months ago we changed over our warp spinning from regular draft to long draft; that is, we put the long-draft attachment on our frames; and for quite a long time we had a very high roll cost, due to the fact that we had more waste collecting in the frame, and it tore up the rolls. We finally made some tests and turned the arbors down and put good heavy cork on—made a good cushion. The work ran much better; we had a much lower roller cost. On our long draft we got just as good quality of yarn and possibly got an average of 1½ pounds better breaking strength, and the work did run a good deal better. We did not change our cleaning schedule.

W. W. Cobb, Supt., Norris Cotton Mill, Cateechee, S. C.: When you put in your long draft, you practically renewed your top rolls, the same as in doing a good general overhauling. Don't you think, if you had overhauled, you would have had as good results?

Chairman: Possibly so, Mr. Cobb.

W. W. Cobb: I am not opposed to long draft; you understand that. But when it first came on the market a few years ago there was quite a craze about it. Then we found we had to give it closer attention. I think quite often we get better results because we have new stuff and give our machines more careful cleaning and more careful attention; and I think if you will do that with the old you will have just as good results.

Chairman: I have a letter here from J. Y. Jones, Supt. of the Newberry Cotton Mills, at Newberry. I will read you:

"In reply to your letter, will say that we have not gone on cork in our entire mill. We have 28 frames on cork, and we have made some tests. We took the scavenger roll waste for three weeks on the 28 cork rolls and 28 sheepskin frames. We found we had 133 pounds more waste on the 28 frames on cork than on the 28 frames on sheepskin.

"We found from tests made by the cork man that we had 55.20 ends down per 1,000 spindles per hour on cork rollers. We had 37.50 ends down per 1,000 spindles per hour on sheepskin rolls.

"Breaking strength was 82.22 on cork, size 18.99. Breaking strength was 81.94 on sheepskin, size 18.74.

"We have not made any change in cleaning, and we have not checked on the cleaning."

Mr. Cottingham: We put 16,000 spindles on it. That was several years ago, and I think the cork now is much better than it was at that time. We found our spinning did not run as well with the cork as with the leather. We did not have the buffing machine at that time and had to send them back to headquarters for rebuffing. So we found we had about nine or ten different sized rolls in the spinning room. By the way, we had to turn down our arbors to put the cork on, and then had to buy new arbors, so have not been so sold on cork since. We were the first to put in long draft. We have tried everything—cork, calf skin and sheepskin, and I find we get the best results with leather. We are now using chrome calf and think we are getting wonderful results with it. As to the cork, I think if you give it proper attention the results will be about the same.

PUTS DATES ON COTS

We found one very interesting thing. We date all of our sheepskin cots. In going through one of the plants a few days ago I found some rolls that had been running five or six years; they had been moved to the back. I found some that had been running only two or three days. It is most interesting to date your cots and see what your rolls are doing.

W. W. Cobb: I don't believe you have as many different qualities of cork as you do in calfskin or sheepskin. You know there is quite a variation in grades of skin. When you say sheepskin, you cover many grades of skin.

ROVING TESTER

Chairman: The next question is: *"What has been the result in the spinning department where an automatic roving tester is used in the card room?" Who can give us some information on that?*

Roy Sweetenburg, Asst. Supt., Ware Shoals Mfg. Co., Ware Shoals, S. C.: We have no figures on our ends down since we started using the automatic roving tester, or before, but we are satisfied with it. We feel that it has done us a lot of good. It has taken out anywhere from one to 13 teeth of twist. That is on 1-inch cotton. It has helped our production more than anything else. We make our 32s warp out of 1⅛-inch cotton. On our slubber we use 1.06; on the intermediate 1.09. We had to cut the spindle speed a great deal in the card room on that staple cotton. We found out that it is of a great deal more benefit to us on staple cotton than it is on ⅞-inch cotton.

Mr. Purvis: Yes, sir. We find that the benefit is not so much in taking out twist as it is in easing up tension. We found the roving was stretched right at the beginning, and our greatest benefit came from adjusting the frame

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so we had the same tension, as nearly as possible, from the beginning to the end.

Mr. Cottingham: I can heartily recommend it, the roving tester, to anyone. It gives more return than any other small investment I know of. We put in long draft. We knew we were putting in too much twist. We found at some stage of making the bobbin it was not even, and the carders got busy. We carried the machine down through four of our plants; we have just completed the fourth one. We took out lots of twist; I do not know just how much. The carders and spinners are delighted with it. In one or two instances we did take out too much twist. But we were very cautious about that, because we did not want to tear up the spinning room. We experimented with it, and when we found out we were right we went ahead. I can heartily recommend that machine to any mill. Two or three small plants might go in and buy one together.

Chairman: Do you test with that machine at regular intervals?

Mr. Cottingham: No, sir, we do not. This machine was taken from one plant to another, and we kept it at each one until we were satisfied. Now we are going back. We took out twist and reduced our speed. That is where we think we got our improvement. You will probably find that your tensions are pretty badly off.

J. W. Wood, General Supt., Gossett Mill, Anderson, S. C.: We have one of those machines, and we have had pretty much the same experience as has already been described here. We have five card rooms. We did find that we could change our twist multiple quite a bit, and we did have the same experience in finding that we had an unevenness in our roving. We cut down the spindle speed, though we did not have such a high spindle speed. We feel that we have paid for our roving tester over and over from the evening up of our yarn and the improvement of our breaking strength. A point that you have to watch very carefully in the card room is not to run your tensions too tight. If you have been using a hard twist in your roving and running the ends about as tight as a fiddle string, of course you are going to get in trouble if your carder insists on running the ends tight in his frame. You have to run them reasonably slack on all the frames in the card room.

Humidity and Long Draft

Chairman: Next question: *"After installing long-draft spinning, did you have to change the recorded humidity in the room? Why?"* Mr. Hardie?

Mr. Hardie: Yes, sir, we had to reduce it a little bit. We try to keep it around 50 to 55.

Chairman: What was the reason for your changing it?

Mr. Hardie: The work ran better. I would say you would need a little bit less because the roving is softer in the creels and would take up humidity more easily.

Mr. Brannan: Yes, sir. I came down and ran around 50, to try it, but I got better results all the way along around 60 per cent.

Chairman: Do you have more humidity since you went to long draft than before?

Mr. Brannan: No, sir, we have less. We dropped it about 5 per cent. We run 1-inch local cotton; 3½ hank roving. Before that we had 1 1/16 Western cotton. It did not take the humidity that this local cotton does with 5-hank roving in your creels, we could use a little more humidity than with the 3½.

Mr. Strickland: The question of humidity depends lots on conditions in your mill. Some rooms hold the water better than others. Humidity, I think, depends more on the conditions in the room than on anything else.

Mr. Leister: We did reduce our humidity a little when we started on long draft. We run from 50 to 55 relative humidity now on long draft.

Mr. Swetenburg: When we made 32s war pout of 1-inch cotton we ran 60 humidity. When we changed to 1½-inch strictly low cotton we had to make it around 50 to keep those pieces of cotton from sliding through.

Replacing Aprons on Long Draft Spinning

Chairman: Let's go on to the next question: *"Is it better to replace the aprons on long-draft spinning frames periodically or as they wear out? What is the best type of leather to make aprons out of?"*

Mr. Leister: I change mine as they run out.

Mr. Leister: We make our aprons from chrome tanned leather.

Mr. Hardie: We use chrome calf. We have been making ours, but I do not know whether it is the best policy or not, because we have not the equipment to split our leather and get it absolutely even. A fellow from Atlanta was in our office this week, and he showed me a cot that the machine people are sending out—brand new. There is a very delicate instrument to test that. That new cot would vary from 6 to 8 or 10 points in thickness. Also, it was cut diagonally. Those people have all the modern equipment for making cots, and I am sure they would be much better than those we could make. I believe the cots we buy cost eleven or twelve cents now, and we could make them for about two. But even with that saving I think it is better to buy them.

That is a delicate little instrument he had, about the size of a watch. We are going to get one to test sheepskins as they come in. I think it is most essential, if a man is on long draft, that he have one of those little machines.

W. E. Hammond, Supt., Balfour Mills, Inc., Balfour, N. C.: We inspect our cots when we change steel rollers, about once a year; otherwise we do not change them unless they wear out. The manufacturers do not recommend making them unless you have a machine for testing them. I did make a few, however. But we buy them now, and we find the difference in the cots is well worth it. We change anywhere from three to five on a frame. Once a year we take out those that look thin or are a little worn. We made just a few, maybe about a dozen, and did not find it satisfactory.

Mr. Strickland: Those that have been on long draft for a long time, do you use sheepskin or calfskin, to make aprons?

Mr. Leister: Calf.

Mr. Cottingham: Calf.

Cleaning Steel Rolls

John S. Lockman: I want to ask you how you clean the steel rolls back in there on long-draft spinning.

Mr. Leister: We clean ours from the under side.

S. P. Cole, Second Hand Spinning, Aiken Mills, Inc., Langley, S. C.: At the present time the spinners use a steel hook, or just their fingers, to clean under there. There is a little device like a screw driver that I have seen used, that winds the cotton off the steel rolls. It cleans them much better than by hand.

Mr. Hammond: There is a little rotor air cleaner that you can get that cleans them very nicely.

Effect of Mixed Cotton on Evenness

Chairman: Next question: *"Will mixing 15/16-inch and 1-inch cotton materially affect the evenness of the* yarn on the old or regular system of drafting? On long draft?"

Mr. Edwards: We have used 1-inch and 15/16-inch mixed together. We thought at the time we were getting pretty good results, but we found on very close examination that our yarn was very uneven. Then we changed, and when we used 15/16-inch cotton used it separately; we did not mix it with the 1-inch cotton at all. When we used the 1-inch cotton we used that by itself and mixed it in the card room. However, we did not get very good results with either one of these and discontinued using 15/16-inch and used 1-inch cotton. That was on regular draft. We have some long draft, and we had the same result on that.

Chairman: Comparing the two, regular draft and long draft, was there more unevenness on the long draft?

Mr. Leister: I can not say as to that. But I can say that in mixing 1inch and 15/16-inch you will have more unevenness than in using 1-inch cotton. We find the best thing is to set the mill for 15/16-inch and run that separately and run the 1-inch cotton separately.

Chairman: I think what they are getting at in that question is whether long draft takes care of mixed fibers better.

Mr. Leister: I don't think you will find any difference in the two kinds of draft.

BUNCHLESS AUTOMATIC CLEANER

Chairman: Let's go on. The next question is: *"What is your experience with the bunchless automatic cleaner over spinning frames? In using it, do you carry less recorded humidity in the room?"*

T. J. Willis: I don't know whether it changed it or not. We run 50, sometimes 55—along there. Just to what extent we have had to change it or did change it I do not know.

Chairman: Do you think the bunchless automatic cleaner has helped you materially?

Mr. Willis: It is one of the best things I know about for flying lint, etc.

J. F. Snipes, Spinner, Matthews Cotton Mill, Greenwood, S. C.: Yes, sir. I think it is one of the best things we could have.

Chairman: Did you have to change your recorded humidity?

Mr. Snipes: Changed it two or three per cent. You know it sucks the air in at the top.

Chairman: Do you think you could do without it?

Mr. Snipes: No, sir, would not want to do without it.

Chairman: Didn't it decrease the cost of the spinning?

Mr. Snipes: Well, some spinners did take on a few more sides.

Chairman: Would they run fewer sides without the cleaning system?

Mr. Snipes: Yes, sir I think they would.

Question: Didn't your end breakage per 1,000 spindles drop considerably after putting in this cleaner?

Mr. Snipes: I think it did drop some. Naturally, the work being cleaner, and keeping it cleaner with the automatic cleaner, it would be better. Then, if a little puff of wind comes in from the outside, it would not make any difference; there is no lint there to be blown into the work.

Chairman: The next question is: *"Please give in detail your experience with variable-speed drive on spinning frames."* Does anyone here have the variable-speed drive?

Professor Willis: I have one down there that I have been testing some. Of course, there are three types of variable speed now—three different companies that are experimenting with the variable speed. I have no results that I could give you at this time, but I do think the variable speed has wonderful possibilities on spinning. That is an opinion not based on sufficient tests.

TRAVELERS AND RING SIZES

Chairman: We'll go on to the next: *"What circle of traveler have you found best for the No. 1 flange ring? Also on No. 2 flange? Give number of yarn, weight of traveler, and whether round or square point."*

John S. Lockman: On No. 1 flange ring I use ¾ circle. For the higher speeds I prefer the square point. The square point will take up less cotton than the round point.

Mr. Strickland: I just have the No. 1 flange ring. On warp I use the square point, ¾ circle, on warp, and use square point, ¾ circle, on filling. The round point is about half worn out when you put it on. Another reason is that I found it did not unthread at doffing as easily as the round point.

Mr. Sweetenburg: On our No. 1 flange rings we use ⅝ circle, square point. On our No. 2 we use 1½ circle, square point.

W. W. Cobb: I have all No. 2 flange rings. I use the round point on warp, circle A-1. On filling I use the square point.

Chairman: Why are you using the round point on warp and the square point on filling, or vice versa?

John S. Lockman: They may be like me; they find something that goes pretty well and they take it. I kept trying until I found something that would go all right. I run square points on my filling, with 6½-inch traverse.

W. W. Cobb: We just thought that square point ran better on warp and round on filling.

Mr. Waldrop: I use No. 1 flange ring all the way through, 1½-inch on warp and 1¾ on filling. For a good long time we used the round point. We changed over to the square point because when the frame stops for any reason at all you get kinks in your yarn. A great many times they go through into the filling. That is the reason we changed over to the square point. But in some instances we had to go back to the round point on finer numbers, because we have more ends down with the square point. Personally, I would rather run the square point if it is satisfactory, but in some cases we have to run the round point.

John S. Lockman: For 50 years spinners have been trying to get a traveler that would regulate the yarn when it comes to the bottom and also when it comes to the top. They have never been able to do that yet. I believe the variable-speed motor is the answer to that problem If we could get it in, we could put the speed on there so that when the traverse is running at the bottom it would be all right and when it is at the top it would be all right. When running a spindle speed of 11,600, there will be a balloon at the bottom. I long to see the time come when with that variable-speed motor we can run just as well with the traverse at the top or bottom.

HEAVIER TRAVELER FOR WORN RINGS

Chairman: We'll go on to the next question: "(a) *Why does it take a heavier traveler for a worn ring than for a new one? Three or four days' running will slick up a ring sufficiently to establish a definite number for a certain speed and yarn number, but sometimes this number of traveler will have to be heavied on every few months until the traveler is several numbers heavier than the one started with. Why?"*

Claude Callas, Overseer Spinning, Ware Shoals Mfg. Co., Ware Shoals, S. C.: It has been my experience that that new ring is not as smooth, and after the traveler runs on a new ring for a while it smoothes it up.

Mr. Burns, Cowpens, S. C.: I have had right much trouble with travelers. We have a long traverse—7 inches My experience on it is that with a new ring it fits up close and holds the yarn down around the traverse, and it takes a lighter one to keep the yarn down. When it gets worn, then it will take a heavier one to hold it down.

Mr. Ellis: I think my answer would be just about what has been said. We know that ring is very highly polished, and that takes some friction off. As Mr. Cobb says, if you do not use a heavier traveler, you know you will have more ends down. It just takes heavier tension when the rings are worn and are very smooth and slick.

Mr. Day: Just how much difference would you make in your traveler if you have an old ring and put in a new one?

Mr. Ellis: I can not tell. It would depend on how much polish there is on them when they come from the factory.

John S. Lockman: There is quite a difference between now and fifteen years ago. I would say that ordinarily you would vary about two or three numbers in the traveler.

W. W. Crenshaw, Overseer Carding and Spinning, Republic Cotton Mills No. 3, Great Falls, S. C.: We started up on 50s yarn and No. 1 flange and used a 16.0 traveler. Within a month we were down to 12.0 traveler and have been there for a year.

Mr. Cole: I find on new rings we use a lighter traveler, due to the fact that the ring is slightly rougher than an old ring, and you have to do something to get rid of the lag on there. With an old ring, naturally it is grooved out some, and you can run with a much heavier traveler.

How Many Spindles Per Spinner

Chairman: We shall have to go on to the next question: "*How many spindles can a good spinner run if the end breakage is 37 per 1,000 spindles per hour? State the yarn number, etc.*"

W. W. Cobb: I haven't made any exhaustive tests, but with that number of end breakages I think a spinner ought to run anywhere around 1,500 spindles without any trouble, or six or seven frames. We used to figure sides. We are coming today to say "spindles," and I can not answer with any degree of accuracy except to say this—a good spinner will run around twelve to fourteen sides on warp with that end breakage.

Mr. Strickland: Of course, the front roll speed and the creel and the size of the bobbin would figure in that. The faster your front roll, the faster it would run out.

Mr. Hammond: We ran a test. Our frames run six hours and fifty minutes. We took the test for that period of time. Our average end breakage is a little low. It ran about 19.2 or 19.3 ends down per 1,008 spindles. On the filling it was 40.8.

Question: What is the spindle speed, front roll speed, and staple of cotton?

Mr. Hammond: One-inch staple Western cotton, middling. Front roll speed, 118. Spindle speed, 10,000. We have cards for checking this, and whenever an end comes down the spinner marks it on that card.

T. D. Lockman, Supt., Monarch Mills, Lockhart, S. C.: I had a spinner, several weeks ago, keep a record of the number of ends down that she had to put up every hour. On 43s filling, with 173 front roll speed, on 1,120 spindles, we found about 85 ends down per 1,000 spindles per hour.

Mr. Edwards: We make a test on that from time to time. We have an experienced man who makes the test for us; we do not allow the spinner to make it, or the weaver. I will have the party that makes the test report on it if you like—Mr. Roche.

Record of Ends Down

Mr. Roche: We have a standard form for making the test. We record on that anything that the spinner does to make an end come down. Then there is a space for the machine, any defect in the machine that makes an end come down. The person making the test keeps in front of the spinner and goes to the end that is down and sees what causes it to come down, staying with the spinner usually two hours at a time, sometimes longer, but very seldom for a shorter time than an hour. Then we add up the ends that come down, multiply the number of spindles by the hours checked, and divide that into the ends that come down, and multiply that by 1,000, and that gives us the number of ends down per 1,000 spindles per hour. On our 30s warp it will run from 25 to 30. On our 40s warp it will average 30.

Mr. Strickland: I have put a section man with the spinner and tried to classify the ends down. We found around 35 on 40s and 25 on 30s in good running work.

John S. Lockman: Does Mr. Roche figure all the ends down, or leave out those due to mechanical defects?

Mr. Hammond: The test I gave did not include the ends down at the doff.

Checking End Breakage

Mr. Willis: I have checked something like 300,000 spindle hours in end breakage, using a form similar to the one Mr. Roche has just described. I have run tests for an hour or two hours and keep a record of them during the day. I have run them as long as ten hours straight. That is day-to-day checking. I find there is no relation between the time of day and the rate at which the ends come down. If your man checks for two hours, he may get a low average of ends down, and if he checks for four hours that may double itself.

Chairman: What are some of the results you found?

Mr. Willis: Anywhere from 10 to 75. In one place they ran to 200.

Chairman: That is ends down per 1,000 spindles per hour?

Mr. Willis: Yes, sir. In this form Mr. Roche described you have all the causes there. To have any basis to go on, the overseer or spinner is supposed to eliminate any due to carding. In the spinning we have to consider the unclassified ends down—that is, due to causes which you can not account for. You can base your running quality on that better than you can on the ends that come down on the doff or from falling lint or these various causes.

Question: What is your general average?

Mr. Willis: For 30s it runs between 35 and 40.

Mr. Hammond: Mr. Chairman, do you think anybody can get an average of ends down on anything less than a week's record?

Chairman: What do you think, Mr. Hammond?

Mr. Hammond: No, sir, I don't think you could. It varies with the conditions in the room and the weather. I don't agree with the gentleman who said there might be so much variation from hour to hour. I think in order to get a really true report it would take a week.

Mr. Edwards: When we make a test we do not make one test and stop. We make it from eight to ten, ten to twelve, one to three, three to five, six to eight, eight to ten, ten to twelve, and those are the tests. We make it all during the day; then we take all those reports and run them together.

T. D. Lockman: Several years ago I had a section man that I took off the section and put on to keep up

(*Continued on Page 16*)

INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

Exceptional Safety Record At Sayles Biltmore Bleacheries

The Sayles Biltmore Bleacheries, Inc., Biltmore, N. C., dyers and finishers of cotton piece goods and manufacturers of sheets and pillow cases, have again established an exceptional safety record.

This plant, situated in the Blue Ridge Mountains, completed the year 1932 without a lost-time accident. The 400 or more employees worked a total of 831,705 man hours. Their goal was to continue during 1933 and reach the million man hour mark, but unfortunately three accidents occurred. This did not allay their enthusiasm to make the plant the safest place in the country, however, and as a result fifteen months have been completed with a perfect record. Up to March 31, 1935, the number of consecutive man hours without a single lost time accident totals 903,727.

Visitors to Sayles Biltmore immediately notice the spirit of co-operation and intense interest in accident prevention work. Safety is indeed the watchword in this plant and everyone from Vice-President and General Manager Fessenden, General Superintendent Odom, Assistant Superintendent Fuller, Insurance Manager Hollingsworth, Plant Nurse Mrs. Shaw, and Master Mechanic MacFarlane to the newest hand, is sincerely and genuinely behind the safety campaign.

It will undoubtedly be interesting to readers to learn of a few of the important factors responsible for the present record.

The general safety committee, averaging 12 employees in number and headed by the master mechanic, holds regular monthly meetings. Every accident, regardless of nature, is thoroughly investigated, cause determined and responsibility placed. Not only must the injured employee be present, but his immediate supervisor is also required to appear. Should the accident cause be of mechanical nature, immediate steps are taken to remedy the condition. If the injured employee is found guilty of negligence or of an unsafe practice, the general committee may penalize such person. If the foreman has been negligent in properly instructing his employee, he will also be penalized. The penalty is usually from one day to a week off without pay. This, they feel, gives the offender ample opportunity to think the matter over.

In addition to the general safety committee, each department has a weekly safety meeting of all employees. This meeting lasts ten minutes at least. Suggestions are offered and discussed, accidents investigated and notification of any new safety rules are given.

Realizing that foremen are the "key men" in any plant matter, a 30-minute meeting of all foremen, officials and the plant nurse, Mrs. R. A. Shaw, is held once each month. Talks, demonstrations, moving pictures and discussions are the implement used to instill safety more deeply in their minds. Anything of general interest brought out in this meeting is carried to the employees by the respective foremen at the employees' weekly meeting.

It has been determined that a great number of accidents are caused by employees being unfit for duty by reason of illness. Any employee leaving the plant for this cause must be checked out through the plant hospital. Upon returning to work, he must again visit the hospital and receive a permit to assume his duties. Any violation of this regulation subjects the foreman and employee to a penalty of temporary dismissal.

The Safety Movement in this plant has perceptibly spread to the village on the plant property. The neat and clean condition of the village compares favorably with that of the plant. The slogan at Sayles Biltmore is "Make this the Safety Plant and Village in our United States."

Annual Report of Textile Foundation

By Stuart W. Cramer

DURING the past year, the objectives of the Foundation, namely, economic and scientific research for the benefit of the textile industry, have been carried on and extended.

The study of the Production and Distribution of Silk and Rayon Goods, a handy volume of more than 100 pages, containing a wealth of valuable information and statistical data, was released and distributed.

A series of experiments on the production, preparation and utilization of flax were started early in the year. Flax was planted in a dozen localities along the eastern seaboard, different types of machines were used to decordicate the straw, and experiments were conducted to determine the possibility of utilizing the flax more extensively on cotton and worsted machinery in the making of paper.

During the cotton planting season of 1934, the Foundation sponsored a series of cotton growing experiments to develop the possibility of producing better types of cotton by limiting certain varieties to production in a community. These experiments are still going on and additional plantings are being made in the present season.

Early in 1934, the study, "The Training of Men for the Textile Industry," was completed and several thousand copies distributed. With this publication, many of you are familiar, but if a copy has not come into your possession, one will be mailed to you upon application to the office of the Textile Foundation, Commerce Building, Washington, D. C. As an outgrowth of this report, the principal aim of which was to suggest ways and means of adapting textile education to more fully meet the needs of modern industry, adjustments have already been made in several of the schools. To bring additional effect to this report, the Foundation has sponsored a series of five semi-annual meetings of all of the deans of the textile schools, the second conference having been held in Greenville during the week of the Exposition in April.

The program of scientific and applied research is being carried on more effectively than ever, by 12 research fellows, working principally in university laboratories, under the direction of men trained in research procedure. Just a few subjects of such experimentation will illustrate the diversity of the problems: Protective Effects in Textile Deterioration and Dye Fastness; X-Ray Analysis of Fibers; Microbiology of Textile Fibers; Biochemical Research on Silk; Carbonization of Wool; Fundamental Study of Printing Pastes; Disposal and Recovery of Textile Wastes.

Semi-annual reports made by the fellows are published in *Textile Research* and reprints are available upon request to the Foundation.

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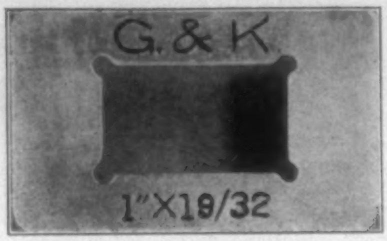
*Address before Annual Meeting, American Cotton Manufacturers' Association, Augusta, Ga.

Picker Stick Sizes and Loom Operating Costs

By J. J. Slein

Graton & Knight Manufacturing Company



One of the Standard Picker Stick Gauges. The other size is ⅞"x19/32"

A recent study of pickers made by the Graton & Knight research organization in their laboratories and in the field brought to light some interesting and valuable facts on the effect of picker stick sizes on cost of loom operation.

When the material for the tests was being collected from various mills, it was noted that there was a very wide variation in picker stick sizes. In fact, thirty different sizes were found in sticks from as many mills and a dozen variations of the nominal size in any one mill.

Since all pickers are made to accurately fit a definite sized stick, it is obvious that pickers of the same size cannot possibly fit all sticks with any degree of accuracy.

What is the result? To simplify our observation, let us divide sticks into three groups—those that are too small—too large—and sticks of the correct size.

If the stick is too small, the picker will be too loose (see illustration). Even though it is shimmed up, it will not be as accurately centered or retain its position as well as it must for most economical operation. This is especially true when the stick is not thick enough and there is marked looseness at the sides of the loop.

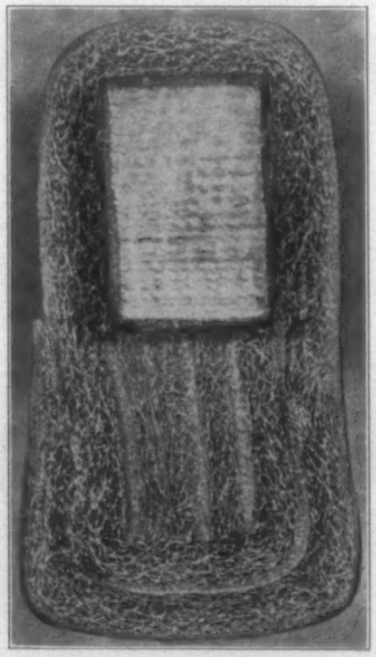
When installed on the loom, it is found after an unusually short run that the loose picker moves to one side or the other and with each blow of the shuttle, the picker is forced to take the impact at one side. Upon continued operation, the head ruptured at the side in a much shorter time than the normal average life of a picker.

Although this accounted for most of the premature failures of pickers applied to sticks that were too small, others failed at the loop. In such cases, the loom was shut down in order to realign the picker and the screw used to hold it in place moved to another posititon in the side of the loop.

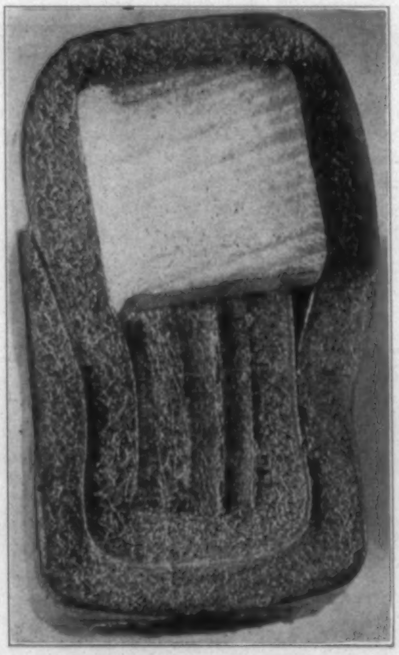
In many cases, three screw holes were made in the loop and the leather so badly weakened that it broke between the holes. Shortly after, the break tore through to the edge of the loop and the picker's usefulness was at an end.

Looking at the illustration of a picker forced on a stick that is too large, you will observe that the shape of the loop is very badly distorted. The loop bulges badly on one side and the face of the picker is not parallel with the front side of the stick. Naturally, the fibres of the leather have been so greatly strained that the loop is weakened even before operation is begun. In fact, in some cases, cracks appear on the surface of the leather in the loop—a definite indication that the strength of the loop has been seriously impaired. Also, the face of the picker is out of alignment with the lay so that each blow of the shuttle drives it farther out of position and shat-

(*Continued on Page 24*)

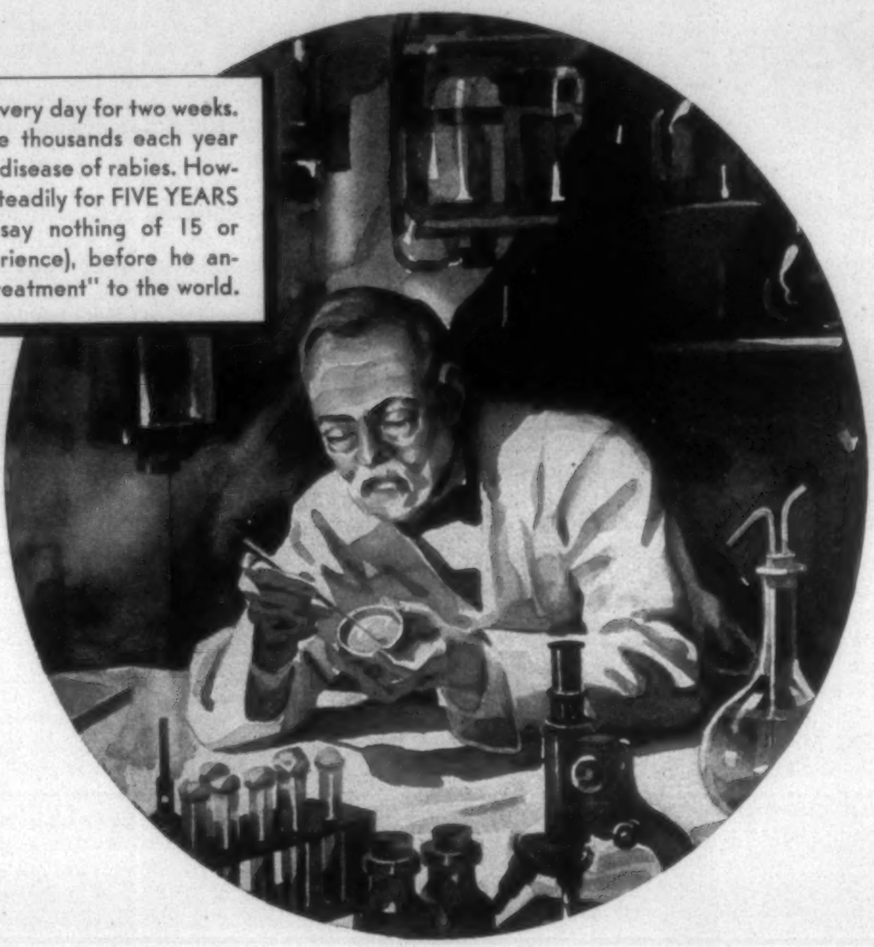


Stick Correct Size



Stick Too Large

One hypodermic injection every day for two weeks. Thus simply and quickly are thousands each year made immune to the dread disease of rabies. However Louis Pasteur worked steadily for FIVE YEARS on this one problem (to say nothing of 15 or 20 years of previous experience), before he announced his now famous "treatment" to the world.



EXPERIENCE MADE BOTH POSSIBLE

Great achievements in any field, once recognized, are always taken for granted, with little thought of the many years of research and experience that made them possible.

Franklin Process Colors are now specified or ordered as a matter of routine by a majority of converters and manufacturers of cotton yarn dyed fancies. Because these colors are dyed in Franklin Process PACKAGE Dyeing Machines, many give full credit for the superiority of Franklin Process Service to the TYPE of MACHINE, and assume that any dyer, using package dyeing machines, can match Franklin Process achievements.

Package Dyeing machines (properly designed) are undoubtedly a big advance over older types of yarn dyeing equipment. However they are only partly responsible for Franklin Process leadership. Back of this leadership, to an equal extent, are 25 years of organization, research and good management.

As a result of these activities, Franklin Process offers not only superior equipment, but also a superior knowledge of dyestuffs, of the methods of application, and of market requirements. Hence customers frequently get better colors within their price range, or more marketable colors, both as to price and quality, than would otherwise be the case.

Experience, above all else, has made such service possible. It can not be duplicated overnight. Achievement is always born of experience. Therefore if you want the best in yarn dyeing service, from all standpoints, look to—

Custom Yarn Dyeing

Natural Yarns **Colored Yarns**

Glazed Yarns

Dyeing and Processing Machines

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Personal News

W. D. Hammett, of Honea Path, S. C., is seriously ill in a hospital in Columbia, where he was taken for treatment last week.

William Toll, Jr., and Mrs. Toll have recently returned from a short trip to Mexico. Mr. Toll is vice-president and treasurer of the Sipp-Eastwood Corporation of Paterson, N. J.

L. A. Bryan has resigned as overseer of weaving at the Micolas Mills, Opp, Ala., to accept a similar position with the Alabama Mills Company, Dadeville, Ala.

George D. Simpkins, who was assistant superintendent of the Collins Manufacturing Company, Asheville, N. C., until the mill recently closed, has accepted the position of superintendent of the Cherokee Spinning Company, Knoxville, Tenn.

Edgar B. Caldwell, Jr., a graduate of the Textile School of North Carolina State College, sailed from New York on May 11th for Buenos Aires, Argentine, to assume a position as foreman of spinning in the Sudantex Mill which the South American Textile Corporation is establishing at that place. Since his graduation from college Mr. Caldwell has been connected with the Aiken Mills at Bath, S. C.

A typographical error regarding changes in the position of master mechanic at the Georgia-Kincaid Mills, Griffin, Ga., appeared in these columns last week. The following is the way the items should have appeared: E. L. Daniel has resigned as master mechanic at the Georgia-Kincaid Mills No. 3. Clifford Grubb, who has been master mechanic at the Georgia-Kincaid Mills No. 2 for the past 15 years, has also been made master mechanic at the No. 3 plant and has charge of the mechanical departments of both these mills.

P. B. Parks, Jr., was elected chairman of the Eastern Carolina Division of the Southern Textile Association, at its spring meeting recently held in Raleigh. Mr. Parks is superintendent of the Erwin Mills No. 5 and has long been actively interested in the work of this Division. Other officers of the Division, as recently announced, include T. W. Mullen, superintendent of the Rosemary Manufacturing Company, Rosemary, vice-chairman, and W. H. Miley, Jr., superintendent of the Erwin Mills No. 2, West Durham, secretary.

P. B. Parks, Jr.

Howard Coffin Heads Southeastern Cottons

Sea Island, Ga.—Howard Coffin of Sea Island was re-elected chairman of the board of Southeastern Cottons, Inc., and other officers also were re-elected at the semi-annual meeting of the organization on Saturday.

Officers re-elected are Elroy Curtis, president; F. W. Jeffers, S. A. Miller, Edward Odegaard, vice-presidents; R. E. Reeves, secretary, and W. W. Stewart, treasurer, all of New York.

Judge To Name Referee in Klumac Mill Case

Salisbury, N. C.—Judge Hoyle Sink in Superior Court here decided he would appoint a referee to determine the financial status between Cannon Mills, Inc., and Klumac Cotton Mills and that the property of the latter, the mill being located here, would not be sold until after the case was heard at the September term of court.

Cannon Mills, Inc., who were selling agents for Klumac, sued the latter for $50,000 last October, the amount remaining due on a note. Klumac, in December, filed a counter suit for $687,000, alleged as damages for an alleged breach of contract. Cannon then, in a supplementary complaint, filed suit for an additional $183,000 advanced on open account as selling agents, the amount based on January 31, 1935.

Cannon also sought a temporary receiver and Paul W. Whitlock, an employee of Klumac, was named. He is now serving and will continue after the case comes up in September.

Special Courses for Mill Men

The Textile School of North Carolina State College announces that during its six weeks' summer session, which opens June 12th, special courses will be given for mill men who wish to supplement their practical experience with some technical training. These courses will be taught by regular members of the Textile School faculty and will include work in various phases of Yarn Manufacture and Knitting, as well as elementary and advanced work in Designing and Fabric Analysis. The courses have been arranged so that those in attendance can devote all their time to the work in which they are especially interested.

During the same period the Department of Field Crops will conduct its annual summer course in Cotton Classing. This course will be taught by Dr. John B. Cotner, a licensed Government grader, who has successfully taught cotton classing courses at State College for many years.

Arrangements have been made so that mill men can divide their time between cotton classing and textile subjects, if they desire to do so.

Further information regarding these courses can be secured from Dean Thomas Nelson or Dr. John B. Cotner by writing them at State College Station, Raleigh, N. C.

Callaway Mills Cleared of Charges

Callaway Mills, LaGrange, Ga., were found not to have violated Section 7 (a) of the Cotton Textile Code in a decision rendered by the Textile Labor Relations Board.

As an outgrowth of a strike at the company's mills beginning on February 28, 1935, three local unions of the United Textile Workers of America filed a complaint with the board, charging: "(1) Failure and refusal to bargain collectively with its employees; (2) interference with the self-organization of its employees; (3) reduction of wages below the code minimum; (4) failure to maintain wage differentials provided by the code; and (5) increase of work assignments contrary to provisions of the code."

The complainant locals also charged that the acts of the company complained of were the cause of the strike, which is still in existence. The board found that the charges against the company were not sustained by the evidence. The board recommended, however, that further negotiations be conducted with a view to bringing about an amicable adjustment and offered its continued services in this connection.

OBITUARY

WILLIAM C. YORK

Sanford, N. C.—Following a few days' illness with bronchial pneumonia and asthma, William Charles York, superintendent of the Sanford Cotton Mills, died at his home here. He was 69 years of age. Mr. York learned the textile business in the cotton mills in Randolph County. In 1899 he came to Sanford to become superintendent of the Sanford Cotton Mills, a position he had held uninterruptedly for 36 years until his death.

J. M. ALEXANDER

Seneca, S. C.—James M. Alexander, 57, superintendent of Newry Cotton Mill, died suddenly at his home at Newry last Friday morning at 6:45 o'clock. Mr. Alexander formerly was connected with the Orr Mills at Anderson. He also lived at Pelzer for a time. Mr. Alexander went to Newry on November 20, 1917. He was a member of the Masonic order at Courtney, of the Red Men, and of the W. O. W., and one of the best known mill superintendents in this section.

Mr. Alexander was twice married. His first wife, now deceased, was Mrs. Etta Bell Alexander. He is survived by his second wife, Mrs. Olive Talley Alexander, and the following children: Mrs. S. B. Wilson, Piedmont; Mrs. Ernest Riley, Newry; Miss Ruth Alexander, Keowee; Misses Etta and Esther Alexander, students at G. W. C.; Joe and Max Alexander, both of Newry; four brothers, W. M. Alexander, Va.; J. Fred Alexander, Seneca; B. M. Alexander, Anderson, and M. O. Alexander, Karey, N. C., and one sister, Mrs. Walter Dobbins, Greenville.

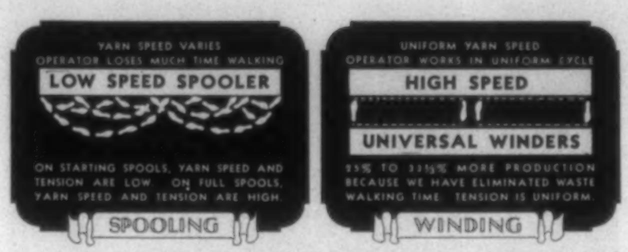
FRANK O. HOFFMAN

Morganton, N. C.—Frank O. Hoffman, 53, nationally-known Morganton furniture and hosiery manufacturer and former president of the Southern Furniture Manufacturers' Association, died in a Chicago hospital. He became ill a week ago while attending the furniture market, but his condition was not regarded as serious.

Mr. Hoffman was president of the Drexel Furniture Company which operated plants at Drexel, Morganton and Marion. He was a member of the National Furniture Code Authority, director of the American Furniture Mart of Chicago, and has attained a prominent place during his 29 years in the industry. He had extensive business interests here, being president of the Drexel Knitting Company, and director of the Morganton Full-Fashioned Hosiery Company, Valdese Manufacturing Company, and the First National Bank.

WILLIAM B. MILLIS

Graham, N. C.—William Brooks Millis, 18, son of J. E. Millis of High Point, president of the Adams-Millis Mills, was killed, and Paul F. Mickey, of Winston-Salem, injured when the car in which they were riding collided with a car driven by Walter Woods of Burlington in Graham shortly before midnight Monday night.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Any high speed system will bring savings over slow speed warping, but in 3 out of 4 mills, the Universal System of High Speed Coning and Warping gives a greater net return on the investment because, in addition to the reduction of non-productive time—

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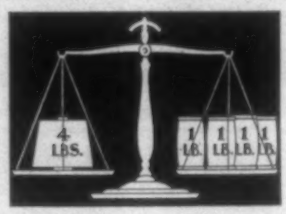
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1 LB.
1 LB.
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1 LB.

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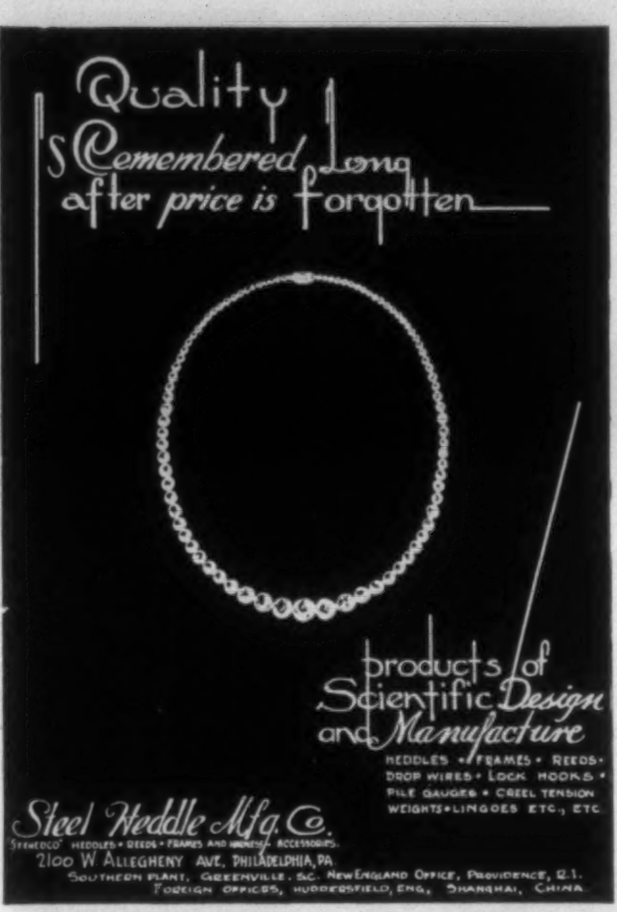

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Spinning Discussed At Clemson Meeting

(*Continued from Page 10*)

with the ends down. We had a form similar to that of which the gentleman spoke. Over a three months' period, making ten-hour tests, we had from 50 ends to 178 ends down, taking it from hour to hour. I should be mighty glad if I knew my spinning would run all the time at 60 ends down per 1,000 spindles per hour, on 30s warp and 43s filling.

Question: What is the diameter of the ring, and what is the diameter of the bobbin, and is it on filling or warp? Be a little more specific, in that regard, and that will clear up the question of this gentleman here a few minutes ago in regard to getting the correct traveler.

Mr. Willis: I am not positive about the barrel of our bobbin. 2-inch ring. Warp. Twist multiple 4.69. Spindle speed, practically 9,600.

Mr. Hammond: Last July we changed to a 13/16 bobbin. Size of ring, 1¾.

Question: Has a test been made for ends down over a period longer than one week? If so, has there been any great variation from week to week?

Mr. Roche: We have checked that for a long period of time. We find that it varies somewhat, but not to any alarming extent. We found a very good average. Occasionally I walk around through a room and find some sides running bad, and we pitch in and make a test. We have this sheet checked up, make the necessary changes, and after a few days find it running normally.

Question: I should like to know how many are running on tape drive altogether, and, if any have tape drive and band drive both, which they prefer.

Chairman: How many have tape drive? How many have band drive? How many have both? (Several hands raised in response to each question.) Mr. Cobb, which do you prefer?

W. W. Cobb: I prefer the tape.

Mr. E.: Tape.

Question: How many have put in band drive in the last ten years?

Mr. F.: I know of only one, and it failed. (Laughter.)

John S. Lockman: I should like to ask some of these men who are getting this good end breakage, what is the age of their machinery?

Mr. Hammond: 1924.

Chairman: Mr. Ellis, what is yours?

Mr. Ellis: I think it is about the year 1. (Laughter.) 1917 and 1918.

Mr. G.: Some of ours is 1889.

Question: Can not Professor Willis tell us something about the banding device?

Device to Tie Bands

Professor Willis: It is a little device that you can carry around in your pocket and that enables you to tie bands on more evenly. The makers say that when you tie the bands on with this instrument they will not vary more than 1½ pounds. So far as the variation between spindles is concerned, I have found from 200 to 300 revolutions difference in tape-driven spindles, and the same amount on band-driven spindles. The makers of this recommend about 6 pounds tension on the band after it has been released ready to run. Now you can see, as against the band tied on with 6 pounds of tension, and the one tied on with 18 pounds tension, it will take more power to drive the one with 18 pounds of tension. I have not tested the life of these bands, because that takes some little time. If your bands are tied on by this little machine, with uniform tension, there will not be as many off on account of humidity as if tied on by hand. I have seen as many as 600 to 700 off because of weather conditions. We found a power saving of about 20 per cent. In some places the saving might be less.

Question: You do not know about the life of the band?

Dean Willis: I asked a man who has had this in long enough to keep a record of the number of pounds of bands he used in a certain period. Before he put it in the spindle speed had been changed by increasing it about 4,000 revolutions. The life of the bands was slightly increased with this instrument over a similar period. Even with the increase in speed, the life of the bands was slightly longer with the instrument. The bands were made of roving.

Question: You will find more variation with the band drive than the tape drive, will you not?

Dean Willis: If they are good bands I don't think so.

John S. Lockman: Don't you find that if a man has been tying on bands for two or three years he can do it just about as accurately?

Dean Willis: No, sir, I don't think so. It would be interesting to have him check himself with the scales. Some mighty good banders have tried it and have not been able to do it.

Question: Has anyone tried conditioning the bands?

T. J. Willis: We did. We used a quart of neatsfoot oil and a quart of castor oil; that was the formula that someone gave me. We tied on one side with treated bands and the other side with untreated bands—124 spindles on one side. Eight bands that had been treated came off, and one untreated. We mixed that oil and dipped in the ends that you unravel—dipped those and hung them up and let them dry.

ONE- AND TWO-PROCESS DRAWING

Chairman: We come to the last question: *"What effects have you noticed on breaking strength, evenness of yarn, and running of work where you use one-process drawing, as against two-process drawing?"*

John S. Lockman: I find two-process a whole lot weaker than one-process.

R. F. Redding, Langley Mill, Langley, S. C.: We made an experiment on 15/16-inch local cotton. The one-process drawing, on 16 tests, had a break of 90¾ pounds, and the average yarn was 18.14. That is the one-process. On the two-process drawing we had a break of 89¾ pounds and had an average number of 18.124. The greatest variation on one process of drawing was from 19.16 to 16.95, and the greatest variation in break was 102 to 83. On the two-process drawing the greatest variation in break was 102 pounds and 75 pounds. Of course, this favored the one-process drawing. This was on 18s yarn. This was merely a test.

T. D. Lockman: I changed a 25,000-spindle mill from two-process drawing to one-process over night, and we ran it for about nine months but never got as good results with the one-process as with the two-process.

David Clark, Editor Textile Bulletin, Charlotte, N. C.: I can not give you the result of any tests, but if you will look in the English Year Book you will find that they do not make any yarns under 40s with two processes of drawing. When I was over there they were laughing at the Americans for doing it.

Mr. H.: We changed from two-process to the one-process drawing over night, too. We got better results than Mr. Lockman did.

Mr. Purvis: We changed from the two-process to the single process and at the same time reduced the speed from 350 to 210, which gives just as good running work.

(*Continued on Page 24*)

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Mills Cleared of Stretch-Out Charges

Francis J. Gorman, head man of the United Textile Workers, has just lost another bet.

Since the strike last September he has loudly claimed that the cotton mills were using the "stretch-out" to such an extent that the health of the mill employees was being wrecked. He prated loudly enough to be heard in high places in Washington. At the end of the textile strike last September, the President ordered an investigation of the machine or work load in cotton mills. Gorman, since that time, has been working the "stretch-out" angle for all it is worth.

Now comes the report from the Textile Work Assignment Committee to the President. The committee is composed of one representative for labor, one for the employees and one for the Government.

The committee virtually exonerates the cotton textile industry of charges of setting up machine assignments that might create excessive work loads on some jobs.

It says on this point:

1. The board is convinced that the great majority of employers in the cotton textile industry have not set up machine assignments that create excessive work loads for the employees.
2. The board is convinced that, through ignorance or otherwise, there are some few employers in the cotton textile industry who have set up machine assignments that may create excessive work loads on some jobs.
3. The board is convinced that, while there are some existing excessive machine assignments and work loads, there are also some existing deficient machine assignments and work loads.
4. The board is convinced that it would be unwise and impracticable to attempt to set up standards of machine assignments in the cotton textile industry, expressed in the number of machines to be tended.

It will be recalled that when the labor specialization plan was first installed, trouble was experienced in a number of plants. We contended at the time that the operatives were justified in resenting installation of the system unless it were carefully worked out from opening room to weave room. Since then the system has been properly worked out so that the more skilled workers do skilled work and the less skilled work is done by unskilled workers. This has increased efficiency of the mills without placing an increased burden on the employees.

The report of the committee shows that "some few employers, through ignorance or otherwise, have set up machine assignments that *may* create excessive work loads on some jobs."

Where such conditions exist the committee recommends that a permanent work assignment board be created to handle cases where excessive work loads are shown to exist, with power to order a work load reduction if it is found justified.

Mill men have known all along that it would be impossible to lay down hard and fast rules governing the number of machines to be tended by individual workers. As the committee report shows, there are too many variables to be considered before arriving at reasonable work assignments and work loads. The report says on this score:

(b) Because of the many variables which have to be considered, the only way a fair or reasonable machine assignment and work load can be determined is by actual study and observation in the particular mill concerned.

(c) The fair or reasonable number of machines for an employee to operate can be determined only by measure of the work load, through technical times studies and observations based on a uniform method such as has been used by this board.

Everyone familiar with mill operations knew that no such conditions as Gorman charged existed in the mills. Gorman, however, asked for a government investigation, got it and is now protesting the report of the committee. In other words, he is running exactly true to form.

A similar investigation of the "stretch-out," ordered by the South Carolina Legislature, a prior investigation by the government and the latest one by another government agency should effectively serve to end all the loose talk and wild charges about the "stretch-out."

Southern Textile Association

The decision of the Southern Textile Association to again hold its annual convention at Ocean Forest Hotel, Myrtle Beach, S. C., is proving a happy selection. Many members have already expressed pleasure that the convention is going back to Myrtle Beach.

The convention dates this year have been fixed for June 14th and 15th.

The program for the convention is now being arranged. We are confident that the meeting this year will prove as interesting and enjoyable as the fine meeting held last year.

David Clark at Chapel Hill

In response to an invitation extended him by a group of students who formed a Chapter of the American Liberty League at the University of North Carolina, David Clark, editor of the Textile Bulletin, left Charlotte Tuesday afternoon for Chapel Hill, where he delivered an address Tuesday evening.

As Mr. Clark will go from Chapel Hill to Sea Island Beach, Ga., to attend a meeting of the Cotton Manufacturers' Association, we will not be able to publish his address until next week, but it suffices to say that he stood flat-footed upon his charges about the teaching of radical professors at the University of North Carolina and offered no apologies.

How Do You Like This?

One of our statistically minded friends wrote us the other day as follows:

> We have been preparing some New Deal statistics. The following is the result:

Population of the United States	124,000,000
Eligible under the Townsend Plan	50,000,000
	74,000,000
Prohibited from working under Child Labor laws and those engaged by Government agencies	60,000,000
	14,000,000
Unemployed on Government relief	13,999,998
	2

> This leaves you and me to produce everything and I'M ALL TIRED OUT!"

The Cost of McMahon and Gorman

We notice the following newspaper dispatch:

> Boston, May 6.—One hundred and six cotton textile mills in Massachusetts, employing 22,819 persons, went out of existence between 1921 and 1934, the State Department of Labor and Industries announced tonight.

If they had gone back to 1910 when New England had 21,000,000 spindles and made a comparison with the 7,500,000 cotton spindles now in operation in New England, the story would have been even worse and we believe that it would have shown that more than 100,000 cotton mill operatives had been thrown out of work.

All of this can be charged to the account of Thos. F. McMahon, Francis J. Gorman and their associates, because they were, during this period, in charge of the textile unions in New England and there was seldom, if ever, a day when there was not a strike at some mill.

Having wrecked the textile industry of New England to the point that there were not enough employees left to pay their salaries and expenses, McMahon and Gorman moved into the South.

Having seen what textile unions did to New England, we could not be true to the textile industry of the South if we welcomed them into this section.

The Merry Commissar

(Atlanta Georgian)

The merry life of Cotton Commissar Wallace, together with a few of his epigrams uttered while New England textile mills are closing and Japan dumps her coolie-paid cotton goods on our shores:

> "All smoke-screen," said the commissar in regard to the protest of the New England textile manufacturers against the processing tax. "A cloak of false publicity and a whining that doesn't do credit to New England ingenuity."

Almost at the same time that Mr. Wallace uttered these flippant remarks President Roosevelt and Secretary Hull were ordering inquiries into the grave cotton situation.

He lost the manuscript of his speech while listening to a "cultured lady" on the question of the processing tax, so he merrily spoke from the hoof, as it were, to the Institute of Politics at Bowdoin College.

He stood up and, as the dispatch says, "he laughed at the idea of Japanese competition."

Now, as the cotton commissar laughed the Amoskeag Manufacturing Company, of Manchester, N. H., was issuing a statement that it had lost over one million dollars in 1934, mainly due to "low-cost imports."

Factories close, the breadlines lengthen, taxes increase, Japan undersells us right in our home markets. But nothing can stay the bubbling epigrams and the mocking laughter of the gayest and goofiest job-holder of them all, Henry A. Wallace.

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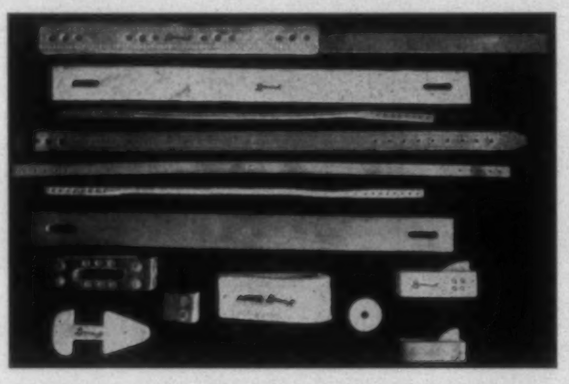

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Mill News Items

COLUMBIA, S. C.—A proposal that the State Highway Department negotiate for purchase of a mill in Spartanburg County was defeated when it came up in the South Carolina House of Representatives.

SPARTANBURG, S. C.—Only routine business was transacted at the semi-annual meeting of directors of the Laurens Cotton Mills, held at the company's offices in that town, according to announcement of N .B. Dial, president. Out-of-town directors who attended the meeting were G. H. Milliken, H. A. Hatch and W. E. Winchester, of New York City, and Albert C. Todd, of Greenwood.

KINSTON, N. C.—Petition has been filed here in Federal Court asking that Judge I. M. Meekins order a direct examination of officers and directors of the Caswell Mills, Inc., to learn the true status of the financial condition and the relationship of the indebtedness of the petitioning debtor and various affiliated firms. It is also asked that the cotton mills be placed in bankruptcy, with assets liquidated at once.

The petition was filed by three creditors of the mill company, L. Harvey & Son, Inc., N. M. Johnson, trading as N. M. Johnson Company, and J. E. Wilson and David Olive, trading as J. E. Wilson & Co.

STANFIELD, N. C.—Foundation work was begun on the plant of Stanfield Hosiery Mills, Inc., chartered recently with authorized capital stock of $100,000, of which $10,000 was subscribed by Wade H. Love, and Brooks Jerome, of Stanfield, and Roy Furr and W. P. Harvell, of Mt. Pleasant. Mr. Harvell will be in charge of production.

Three buildings will be erected. The mill proper will be 24 by 75 feet, in which 22 machines for the initial production will be housed.

Present plans call for the manufacture of cotton or cotton and rayon hose, principally men's work hose and misses' anklets. Other lines will be added later, it is said. About 40 operatives will be employed at first.

GREENVILLE, S. C.—Dividends totalling $75,000, to be paid July 1st, have been voted at the annual meetings of directors of two cotton manufacturing plants of this section during the last few days.

Directors of Piedmont Manufacturing Company met at the mill office at Piedmont and voted a 4 per cent dividend on $1,600,000 common stock, amounting to $64,000.

The directors of Chiquola Manufacturing Company at Honea Path met at the mill office at Honea Path Tuesday and declared a 3 per cent dividend on $358,000 preferred stock, amounting to $10,740.

Annual reports were heard at the meeting at both mills.

The following officers were re-elected at Piedmont: S. Marshall Beattie, president and treasurer; W. H. Beattie, assistant treasurer; W. C. Cleveland, vice-president; and S. B. Wilson, secretary. Stockholders met before the directors and re-elected all directors.

Directors of Chiquola Mill re-elected the following officers: L. O. Hammett, president and treasurer; J. D. Hammett, assistant treasurer; J. E. Sirrine, of Greenvillec, vice-president; and W. G. Cox, secretary.

Mill News Items

GREENVILLE, S. C.—A corporation is being formed to erect a building of 40,000 square feet to house the Piedmont Shirt Company when the firm vacates the present quarters on Court street upon the expiration of the lease the latter part of this year, officials of the company announced.

The cost of the new building has been estimated at $50,000.

VALDESE, N. C.—The George Blankenstein hosiery sales agency has leased the Old Pauline Hosiery Mill building from the Waldensian Hosiery Mill and is installing about fifty machines. This new mill will be known as the Blackstone Hosiery Mills and it will manufacture men's half hose, which will be finished by the Waldensian Hosiery Mills.

OPELIKA, ALA.—After a hearing held recently, a motion by lawyers for the State of Alabama that a bankruptcy sale offer of $40,000 be accepted for the Opelika Manufacturing Company, cotton yarn manufacturers, in order to satisfy past due county and State taxes, has been denied here by Judge O. P. Lee, referee in bankruptcy. He stated that the offer of $40,000 made on April 19th, by the Alabama Oil & Guano Co., did not meet requirements of the court. Judge Lee ordered John Allen Jones, trustee, to offer the property for sale again at an early date to the public at large or privately, in part or in whole. The mill property consists of 92 acres of land, 100 mill village houses, all the machinery, accessories and equipment. In December of 1934, the financial collapse of the Opelika Manufacturing came. Its outstanding indebtedness at the time of the collapse is said by Judge Lee to have been about $300,000, including debts to commercial concerns and stockholders. State and county taxes past due amounted to $39,400.

SPARTANBURG, S. C.—Following the payment of all creditors in full since the sale of the plant last fall, a balance of $190,874.06 is now in the hands of the receivers for Arcadia Mills ready for distribution to the holders of the more than $800,000 in preferred stock, after certain costs and commissions are deducted, according to an order signed by Circuit Judge Thomas S. Sease.

The figures were set forth in one of four orders handed down by the judge in which the court denied the petitions of four holders of $30,600 in preferred stock setting forth claims for payment of the stock in full.

CHATTANOOGA, TENN.—The Davenport Hosiery Mills, Inc., filed application for permanent registration with the securties and Exchange Commission on the New York Curb Exchange of 96,625 shares of common stock, of which 75,000 shares have been issued and 21,625 unissued. Information regarding salaries of officers and bonuses, if any, is filed with the commission as "confidential material," and will be so considered if the request of the corporation is deemed valid. This action is permissible under the act setting up the commission.

Stocks held by officers of the corporation and those holding 10 per cent or more of the firm's issues follow:

R. B. Davenport, president, common, 1,600; J. H. Davenport, first vice-president, common, 2,800; R. B. Davenport, Jr., director, common, 3,000; Burkett Miller, director, common, 2,000, convertible 7 per cent cumula-

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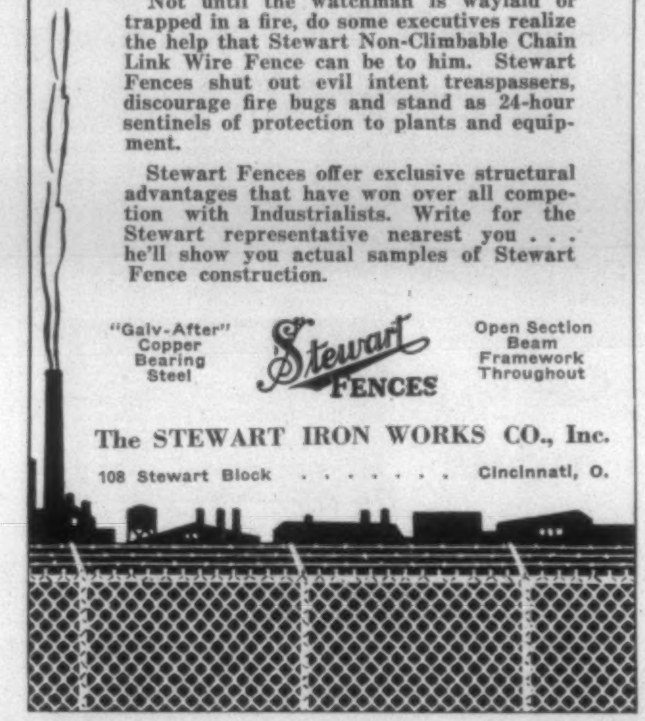

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STONY POINT, N. C.—American Trust Company, Charlotte, N. C., trustee under the will of Henry T. Steele, announces Adell Yarn Mills, Inc., for sale at auction at Stony Point, on the premises, June 11th at 11 o'clock a. m., the physical assets, including land, buildings, machinery, mill cillage and other physical properties, about 11,000 pounds of stock in process and various supplies, to the highest bidder, for cash or such terms as the trustee may approve. All bids subject to confirmation by the court. Sale for the purpose of settling an estate.

"Stretch-Out" Report Exonerates Mills

(*Continued from Page 3*)

cloth. Under this system, operatives other than the weavers perform the work of replacing the filling yarn, which task alone formerly took about half of the weaver's time; others take off the cloth and still other operatives do the oiling and the cleaning. Relieved of these simpler duties which required more than 50 per cent of his time, the weaver is able without additional effort to look after a substantially greater number of looms and thus utilize his skill and ability in the producing of more cloth."

FINDINGS OF BOARD

At this point the board makes its findings, the chief of which was that "some few employers" have set up machine loads that "may" create excessive work loads on "some" jobs.

The board took the position that the stretch-out problem is local in that each mill must have its own formula for work loads.

On this point, the report said: "In a well run plant, using good raw material, with proper operating conditions and good running work, an operative may tend, with much less effort, substantially more machines than is practicable in another mill on the same class of products but where conditions are less favorable. It is impracticable, therefore, to set up standards of machine assignments in terms of number of machines to be tended.

Any standards that could be considered reasonably just to the well run and properly equipped mill, using good raw materials, would result in machine assignments that would be excessive in plants where the conditions were not so favorable and would mean that the employees in the poorer plants would be subjected to a burdensome, excessive and perhaps impossible work load.

"(b) Because of the many variables which have to be considered, the only way a fair or reasonable machine assignment and work load can be determined is by actual study and observation in the particular mill concerned.

"(c) The fair or reasonable number of machines for an employee to operate can be determined only by measure of the work load, through technical times studies and observations based on a uniform method such as has been used by this board.

"(d) In making a complete study in a cotton mill, from opening room through weave room, but not including subsequent processes such as dyeing, bleaching, finishing and packing, there are more than 600 variables that must be taken into consideration with reference to fair and reasonable work assignments and work loads.

DATA IS CITED

"(e) Our conclusions expressed in this section are definitely proven by the wide variance in data obtained from the mills."

To illustrate the point, the board cited replies to its questionnaires showing one mill used 1⅝-inch cotton while another used short cotton waste; one mill's weaving looms had a speed of 200 picks per minute while another had 40; one had average of six stops per hour, another 18; in one mill a weaver attended 120 looms and in another one loom, and the number of looms per fixer in one mill was 204 and in another 24. These were the highest and lowest cases.

The board came out strong against any plan which would force the mill to secure a special authorization from an agency before increasing machine assignments. This would work a hardship on the mill and discourage purchase of and use of improved and more efficient machinery.

The board was further convinced that where disputes arise as to the proper machine loads the employee and employer should give every reasonable opportunity and encouragement to settle such disputes between themselves. Before increases are made the employees should be notified, the report said.

Outlining the scope and duties of the board it proposes to set up, the stretch-out investigating board said:

"1. The board is to be a fact finding board and independent of any supervision other than that designated by the President and free from outside interference.

"2. If an employee and employer shall have been unable to arrive at an amicable agreement with reference to machine assignments then, upon petition, it shall be the duty of the board to investigate the machine assignments involved, and if, after opportunity for both parties to present their views on the questions involved, it finds that such machine assignments create an excessive work load the board may require the employer to reduce such machine assignment accordingly.

UNIFORM SYSTEM

"3. The board, in studying and investigating machine assignments, should use a uniform system of questionnaire and time study sheets similar to those made up and used by the temporary Cotton Textile Work Assignment Board.

"4. Any person who shall knowingly interfere with any member or agent of the board, in the pursuit of his duties, shall be subject to a fine of no more than $1,000 or imprisonment for not more than one year, or both, for each offense.

"5. When, as, and if these recommendations are adopted, every plant in the branches of industry operating under the code of fair competition for the cotton textile industry shall be required to post a copy of the rules and procedure where the same may be read by the employees at all times the plant is in operation.

"We believe the above conclusions and recommendations are sound, since the (1) are based on actual facts, impartial and careful study and reasonably long observattions; (2) are just and fair both to industry and labor; (3) provide a workable and adequate means of handling the work assignment problem; (4) provide for the worker a definite, simple, fair and effective means of appeal and of relief in case of overload; (5) do not impose upon the mills impracticable requirements nor restrictions on the right of the individual plants that would prevent machine assignments suited to their conditions, and (6) do not discourage use of improved machinery, better methods nor scientific management, which is prohibited or in any way limited would retard further progress of industry and labor."

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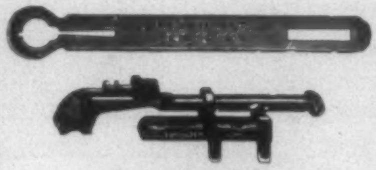

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Spinning Discussed At Clemson Meeting

(*Continued from Page 17*)

We left it at that speed and have had it that way for several years.

Mr. Lockman: We reduced our speed from 370 or 330, I am not sure which, down to 220.

Mr. Purvis: I think you will find where they do have success with it they reduced their speeds.

Chairman: Mr. Cottingham, did you reduce your speed any?

Mr. Cottingham: Yes, sir, down to 225, I think.

Question: I should like to ask Mr. Clark what he thinks about this.

Mr. Clark: I think if you should run five drawings you could not hold the work together. I didn't know there was any mill running drawing at as high speed as 350. I think it was agreed ten years ago at one of these meetings that 220 is the best speed for drawing.

Mr. Cottingham: Our superintendent got sick once, and I had to run the mill, and I cut out one process of drawing. We raised our breaking strength six pounds on the yarn.

Good Results From One-Process

P. McGarity, Supt., Mills Mill No. 1, Greenville, S. C.: We changed from two processes to one-process of drawing and think we get better results on the one-process. Of course, we cut our speed at the same time. We get a little better breaking strength—about two pounds. The yarn is just about as even, or, in fact, I think it is a little evener.

Chairman: Why did you change?

Mr. McGarity: Well, at the first mill where I was when we changed the drawing was worn out. I could not get them to buy new drawing, so we just decided to throw the old machines out and use the better ones. My experience at that mill was good, and when I went to another mill I changed just to save the power and the running of the frames. That was on 30s and 40s. Length of traverse, 6 inches. Warp. Ring, 1⅝. When we changed at this mill the carder was against it, and the second hand said I was fixing to tear up the mill. (We did not change all at one time in this second mill.) But after two or three weeks the carder and the second hand both wanted me to change the rest of it.

Question: Were any changes made in the other processes when this change was made?

Mr. Cottingham: We found we had to change the settings on our slubber.

This concluded the discussion.

Picker Stick Sizes and Loom Operating Costs

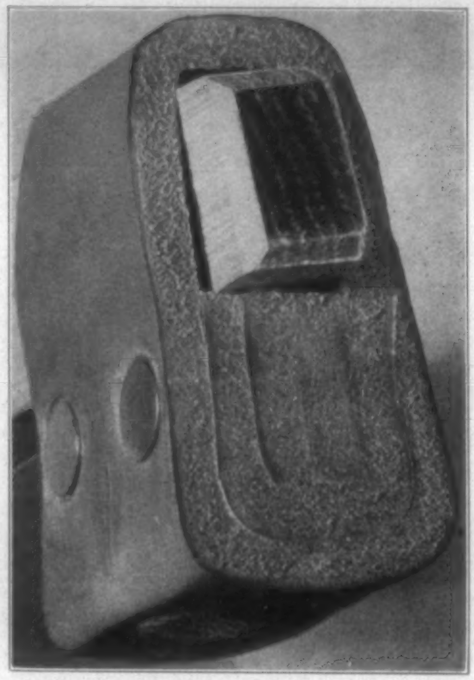
(*Continued from Page 12*)

ters it long before it would break down if accurately fitted to a stick of correct size.

What happens when a stick is too small or too large can and does happen too when the picker stick is warped out of shape or the front and back are not cut at right angles to the sides.

Contrast this with a picker properly fitted to a stick of correct size and shape The loop gives just enough to make a permanent tight fit when the picker is driven into position on the stick. There is no looseness to let it slide to one side or the other—the loop is not strained beyond the natural elasticity of the leather. The picker maintains its position constantly at right angles to the lay. Every blow of the shuttle is received at the right point to insure the longest trouble free service consistent with the type of leather used and the construction of the picker.

When consideration is given to these facts, it is obvious that care in applying pickers to sticks of the correct size is a factor which can aid in reducing weaving costs. It mill minimize shutdowns and consequent loss of production time due to picker failures, and it will reduce picker cost. To help mills eliminate this cause of increased loom operating cost and enable them to obtain the most economical service from pickers, Graton & Knight research engineers have adopted two standard sized picker loops, 7/8"x19/32" and 1"x19/32". These are correct for the sized sticks which are most widely used and which will probably become the industary standard.



Stick Too Small

In order that the correct picker application may be easily determined, Graton & Knight furnishes small metal gauges. Sticks of the correct size will fit these gauges snugly at the shuttle point when the gauge is at right angles to the face of the stick. Several hundred of the 1"x19/32" gauges were given to visitors at the Textile Show. However, both sizes are now available, and Graton & Knight will be glad to furnish them to all mills that are interested.

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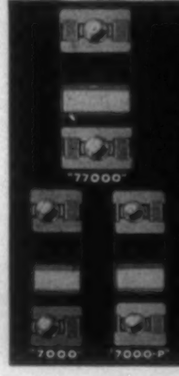

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Durham, N. C.—K. P. Lewis, president of the Erwin Cotton Mills, in an address before the Durham Kiwanic Club at the Washington Duke Hotel, pleading for relief from ruinous Japanese competition and from a burdensome processing tax, declared that the situation has not only disrupted domestic business but has lost to American mills their foreign markets.

He said that the NRA has failed, in that buying power has not been increased sufficiently to permit the maintenance of an adequate volume of business under the greatly increased costs of operation under the National Recovery Act.

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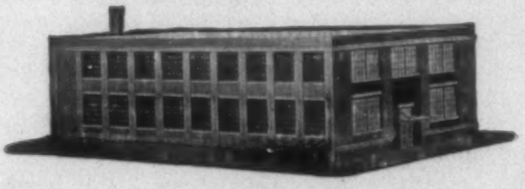

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Stocks Of Hosiery Decline

American hosiery manufacturers produced 9,692,000 dozen pairs of hosiery during March of this year, according to the monthly statistical bulletin of the Hosiery Code Authority which will be mailed to the industry this week. This production represents a 5 per cent increase over February, when production was 9,214,000 dozen pairs, but is lower than that for the corresponding month of last year when 10,471,000 dozen pairs were produced. Excess of March production over February production this year was only one-third the increase shown for the corresponding period last year.

Shipments of hosiery during the month amounted to 9,768,000 dozen pairs, the excess of shipments over production appearing entirely in the field of seamless hosiery. This shipment figure is a gain of 12 per cent over February when shipments were 8,732,000 dozen pairs, but again falls below March of last year when shipments were 10,488,000 dozen pairs. This excess of shipments over production, which was particularly noticeable in the cases of infants' goods, children's ⅝ flat and ⅞, boys' golf hose and anklets, is regarded by the code authority as seasonal.

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Aspinook Asks Right To Move Plant South

Jewett City, Conn.—In his call for the annual stockholders meeting, Phillip A. Johnson, president of the Aspinook Company, one of the largest finishing plants in New England, asks the stockholders to give the board of directors permission to remove the plant either in part or in its entirety to the South if found necessary. He writes as follows: The spinning and weaving branches of the cotton textile industry have been migrated to the South for several years and the conditions which led to this apply also to the finishing business. The principal elements affecting this situation are saving in freight on transportation of cloth from the mills to the finishing plants and to consumers lower labor costs, lower fuel costs and in many instances tax advantage. In the opinion of your directors it is desirable to explore this possibility and the approval of the stockholders is asked so that if conditions arise which make such a change desirable in whole or in part they will be in a condition to negotiate."

Chilean Mills Expand

The manufacture of textiles has been given great impetus in Chile because of the depreciation of the peso in terms of foreign currency. Formerly cotton textile mills depended almost entirely upon imported yarns, but one mill at Santiago is now producing 1,000 pounds of cotton yarn daily, and another local company is installing machinery for this purpose. The cotton textile factory at Chiguayante (Concepcion) is also preparing to spin its own yarn. In addition, a Bolivian concern is reported to be planning the construction of a factory at Valparaiso for the manufacture of textiles.

Part of New du Pont Unit Now Working

Richmond, Va. — The spinning process in connection with the manufacture of rayon is now in operation in a portion of the new 5-million-dollar addition to the du Pont rayon plant at Ampthill. More than 300 employees are working in the addition. Only a portion of the new plant is now in use.

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Cotton Goods Markets

New York.—The cotton goods markets were somewhat firmer at the end of the week. Inquiry was considerably more active, buyers showing more interest in goods for future delivery. Some of them tried to cover at the lowest prices noted earlier in the week, but were generally unsuccessful. It was understood that several million yards of print cloths could have been sold on Friday if mills had been willing to accept less than full asking prices.

Print cloth business was limited, largely as the result of houses refraining from accepting the bids of buyers who sought concessions of ⅛c. Buyers also sought to cover on June-July deliveries and found sellers wanted full holding levels for the period. There was a firm holding price of 8⅞c on 39-inch 80 squares with bids for June-July of 8¾c, all turned down. A carryover from the day before represented a sale of 300,000 yards at the lower figure For 39-inch 68x72s 7⅛c was the low of the market with bids of 7c and 7 1-16c refused. A number of moderate quantities sold at the higher price quoted.

Steadiness marked the narrow sheeting market, in which scattered sales were negotiated during the day. Buyers paid 9⅛c and 9¼c for 40-inch 2.85-yard, depending on make, both feeler motion goods. Covering on 31-inch 5-yard was at 5¾c, 40-inch 3.75-yard firm at 7⅝c, 36-inch 5-yard 5¾c, 37-inch 4-yard 7⅞c, one make being available at 7c. The situation in narrow sheetings is reported less than satisfactory, a number of mills holding several weeks production on hand. There appears no immediate opportunity to plan curtailment in the division, though a number propose the necessity of 50 per cent.

Fine gray cloths at the close were reported to be selling in limited quantities, a few rayon styles being in short supply and their scarcity threatening to continue and possibly to become more aggravated during the course of the next week. Evidence of this evolution of the market could be observed in another advance going through on the low-count rayon taffetas.

Print cloths, 27-in., 64x60s	4 13-16
Print cloths, 28-in., 64x60s	4 13-16
Gray goods, 38½-in., 64x60s	6⅛
Gray goods, 39-in., 80x80s	8⅝
Gray goods, 39-in., 68x72s	7
Brown sheetings, 3-yard	9
Brown sheetings, standard	9¾
Tickings, 8-ounce	17½
Denims	14
Dress ginghams	16½
Brown sheetings, 4-yard, 56x60	7¾
Staple ginghams	9½

J. P. STEVENS & CO., INC.
Selling Agents
40-46 LEONARD ST., NEW YORK

Cotton Yarn Markets

Philadelphia, Pa.—The yarn market was fairly active last week and most merchants noted an improving trend. Inquiry was somewhat lighter at the close of the week, due to the fact that buyers were apparently not willing to follow the stronger price trend. In some quarters it was noted that buyers were more willing to consider future needs but most of the trading was for prompt delivery. The average order was on the small side.

Among the contracts placed were a number for from 50,000 to 100,000 pounds. Most of them came from the knitting industry which is making provision to turn out fall and winter garments.

It is customary in the cotton yarn market to consider the peak of spring demand as occurring in April and early May. During June the custom is to look for a lighter volume of covering. With so many odd changes in the situation the trade is uncertain whether June will carry its usual form of proving poor for new business. That prospect accounts for a number of spinners preferring to sell at competitive prices rather than quoting higher and waiting for buyers to reach those levels.

For the week ended April 27th gray carded yarn sales went down to 2,856,000 pounds, the mills' share being 1,100,000 pounds and selling agents 1,756,000 pounds. Colored yarn sales totalled 217,000 pounds, mills selling 124,500 pounds direct and selling agents 92,500 pounds.

Spinners of single combed yar nare shipping against contracts for the new supporter type of men's underwear. Stocks of wanted yarns are now reported small, but the peak of the current demand has been passed. The trend of prices is more definitely upward in combed than in carded yarns.

New business in mercerized qualities has been small, but specifications on old contracts are good, indicating that the time is close at hand when many knitters will have to place new contracts as this condition has been reported for several months. Prices are unchanged at 70c for 60s two-ply and firm.

Spinners of single combed yarn are shipping against The trade hopes that the delayed spring buying will develop within the next several weeks.

Southern Single Warps

10s	26½-..
12s	27 -..
14s	27½-..
16s	28 -..
20s	29 -..
26s	32 -..
30s	33½-..
40s	40 -..

Southern Single Skeins

8s	26 -..
10s	26½-..
12s	27 -..
14s	27½-..
20s	29 -..
26s	32 -..
30s	33½-34
36s	37½-..
40s	40 -..

Southern Two-Ply Chain Warps

8s	26½-..
10s	27 -..
12s	27½-..
16s	28½-..
20s	29½-..
24s	31½-..
26s	32½-..
30s	34 -34½
30s ex.	35 -..
40s	40 -41

Southern Two-Ply Skeins

8s	26½-..
10s	27 -..
12s	27½-..
14s	28 -..
16s	28½-..
20s	29½-..
24s	31½-..
26s	32½-..
30s	34 -..
40s	40 -..
40s ex.	42 -43
50s	49 -..

Duck Yarns, 3, 4 and 5-Ply

8s	26½-..
10s	27 -..
12s	27½-..
16s	29 -..
20s	29½-..

Carpet Yarns

Tinged carpets, 8s, 3 and 4-ply	23 -24½
Colored strips, 8s, 3 and 4-ply	25 -..
White carpets, 8s, 3 and 4-ply	26 -27

Part Waste Insulating Yarns

8s, 1-ply	22 -..
8s, 2, 3 and 4-ply	22½-..
10s, 2, 3 and 4-ply	24½-..
12s, 2-ply	24½-..
16s, 2-ply	26½-..
20s, 2-ply	28½-29
80s, 2-ply	33 -33½

Southern Frame Cones

8s	26 -..
10s	26 -..
12s	26½-..
14s	27 -..
16s	27½-..
18s	28 -..
20s	28½-..
22s	29½-..
24s	30½-..
26s	31½-..
28s	32½-..
30s	33 -..
40s	39 -..

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Last Longer, Make Stronger Yarn, Run Clear, Preserves the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

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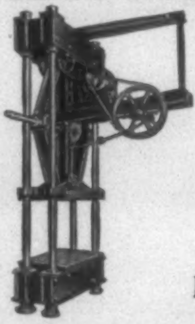

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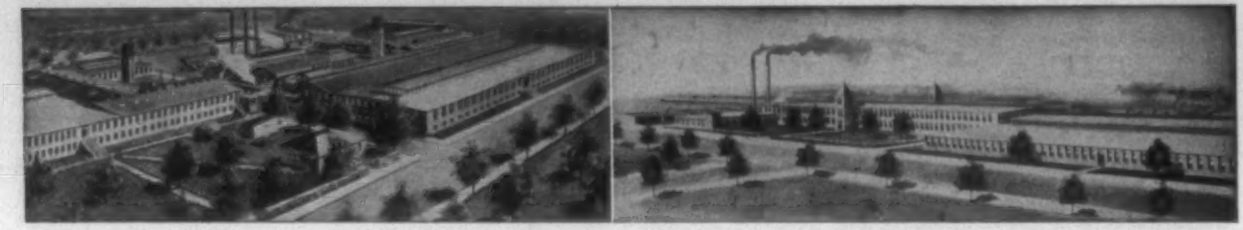
CHARLOTTE, N. C.



Visiting The Mills

By Mrs. Ethel Thomas Dabbs (Aunt Becky)

ANDERSON, S. C.

ORR COTTON MILLS, WHERE OPERATIVES NEVER LEAVE AND WHERE TRUE FRIENDSHIP AND LOYAL CO-OPERATION MAKE AN ATMOSPHERE OF HEARTY GOOD-WILL THAT IS EVERYWHERE EVIDENT.

One feels pepped up and enthused for days, after a visit to Orr Cotton Mills. The president and treasurer, M. P. Orr, is six feet eight and a half inches tall, and of course "looks down" on everybody, and everybody "looks up" to him—and likes it.

Right here in the office, one is instantly impressed with the sincerity of purpose and hearty good will of every official. There are no grouches. No whiners. No pessimists. Sunshine and smiles are plentiful. Warm hand clasps and hearty greetings make one tingle with pleasant thoughts and feelings. And why can't everybody be kind and courteous—really and sincerely? There is nothing that costs less or pays bigger dividends.

Small wonder that no changes ever take place here, or that operatives appreciate their jobs and are ready to fight for them, if necessary, and they did it once—very effectively.

G. P. Hammett is assistant treasurer, and R. W. Sullivan, secretary. Superintendent J .A. Lyons has been here so long that he says he "can't remember that far back!" He has a handsome son in the office with him.

OTHER KEY MEN

D. C. Jolly is overseer carding; C. L. Cooper, overseer spinning; W. E. Childs, overseer cloth room; S. H. Bevill, overseer weaving; T. R. Barton, R. F. Thackston and C. M. Mahoney, second hands in weaving; J. C. Hawkins and J. A. Glenn, second hands in carding, and Tom Bailey, section man.

H. K. Whitten and J. C. Jordan, second hands in spinning; Owen Overcash, in spooler room; Ottie Evans and R. D. Stovall, section men in spinning; O. P. Moss, tying-in; M. W. Grogan, slasher man; C. C. Buchanan, in picker room; H. G. Gibson ,elevator man; W. T. Bolt, E. H. Coffee and W. G. Lecroy, loom fixers; G. O. Williams, time keeper; L. T. Herring, master mechanic, and J. C. Herring, outside overseer.

APPLETON CO.—THIS WAS FORMERLY THE BROGON MILLS, AND AMONG THE NICEST IN ANDERSON,

AND THE SECOND LARGEST

Anderson Cotton Mills (now closed) are the largest mills, and Appleton Company is next, according to Clark's Directory, which gives this plant 70,420 spindles and 1,882 looms, some of which are standing.

Chas. Walcott, of Boston, Mass., is president; D. D. Little, treasurer; E. L. Bowen, assistant treasurer. C. H. Strickland is superintendent—a gentleman well known in the textile field of South Carolina.

Cotton outing is made here, and the product has a reputation for satisfactory wear. The village homes are very attractive, and gardens and flowers flourish in the fertile soil.

Fine churches, the best of schools and other advantages are conveniently located, and the people take advantage of their opportunities for improvement and advancement.

DEPARTMENT HEADS IN THE MILL

W. O. McElrath is overseer carding; J. L. Rhinehardt, formerly superintendent of Phenix Mills, Kings Mountain, and also he held a responsible position with Manville-Jenckes, Loray Plant, at Gastonia—is overseer spinning and has a nice, well-kept department; Joe Duncan is second hand in spinning.

L. Z. Humphries, overseer weaving; on a diet at home, but makes up for it in the mill cafeteria. (He says he is "off forty pounds," but who saw him weigh? He looks as big as ever and that means big.

A. Williams is overseer the gray rooms; J. A. Fowler, cloth room; S. M. Heggood, master mechanic.

This mill has been running regularly, but had begun to curtail a bit. But gee whiz—who cares for that? Everybody likes to visit, go fishing and have picnics, and it is getting hot enough to enjoy such things.

HARTWELL, GA.

THE HARTWELL MILLS HAVE OVER 8,000 SPINDLES AND TWO HUNDRED AND SIXTEEN LOOMS, RUNNING REGULARLY.

This nice little textile plant is close to the heart of town and a vital part of it. It runs when other mills curtail and peace and harmony abide here.

That genial and well known gentleman, Mr. John H. Cheatham, of Griffin, Ga., is president and treasurer; the local manager and vice-president is S. W. Thornton, a man liked by all who know him.

The young superintendent, Johnston McCorkle, recently took unto himself a wife, a charming girl of Hartsville—Miss McGill. The writer heard about it while in Anderson, and then made inquiry on reaching Hartwell, finding it true.

Mr. Thornton had been attending a "Clover Day Festival" and was wearing appropriate decorations on the lapel of his coat—a crimson clover blossom on a crimson badge. The idea was to promote and encourage the planting of more clover—something that would benefit every locality in the South, could the idea be sold to farmers.

The Key Men at This Mill Take Our Paper

E. C. Cobb is overseer carding and spinning; H. C. Anderson, overseer weaving; S. J. Burden, overseer cloth room; H. M. Banister, master mechanic.

Other live wires and progressives are: Louis Baker, J. T. Banister, L. D. Brown, Monroe Casey, Clate Elrod, Otto King, Jewell Manchett, W. P. Norman, Walt Wilkerson and A. R. Williams, second hands or section men.

Traffic Light Signals—Human

Down in Georgia a few days ago a policeman stopped a young lady motorist at a street crossing. "What is the matter?" she asked, looking around. "I don't see any traffic light."

"I'm the traffic light at this crossing," explained the cop, rather crossly. The young lady smiled, saluted and said:

"Turn green, Mister, turn green—I'm in a hurry!"

(More than likely he turned "red.")

GRANITE FALLS, N. C.

A Live Town Full of Friendly People—Pretty Villages A Mills

The textile industry is well represented here, and the products are varied. Corpening Hosiery Mill makes rayon plated half hose; Caldwell Hosiery Mills and Granite Hosiery Mills, men's hosiery; Falls Manufacturing Company, 18s to 50s combed peeler knitting yarns.

Beside the above, the Shuford Mill organization has four mills, Granite Cordage Company, and Granite Falls Manufacturing Company, which has Mill No. 1, Mill No. 2, and the Allred Plant. And these are the mills where we have so many goods friends and readers of our Textile Bulletin. The product is braided sash cord, carpet warps, twine, etc., and we have never found these mills idle.

The villages are very attractive, with neat homes nicely painted, pretty flowers and good gardens. The deceased superintendent, Mr. Allred, was for many years in charge of these mills, and planted lots of roses and trees that are left as a monument to his memory. Banks and fences are covered with roses—his favorite flowers—and in season the entire place is a bower of beauty.

The people are sincerely friendly, and it is always a joy to visit them. I can't remember the name of the charming young lady in the office, but I do remember her smiles. Frank Dennis, general superintendent, D. M. Cline, assistant superintendent and office manager, are among the finest and best of mill men, and the operatives say so very emphatically. They appreciate their jobs and the people for whom they work, and "Mr. Alex" (A. A. Shuford, Jr.), president of the Shuford Mills Company, is a general favorite. It is truly refreshing to find a community where loyalty and co-operation are key-words. This is the only way we can bring back real and lasting prosperity. Capital is helpless without labor, and labor is just as helpless without capital. To work for mutual good means everything for the worker who depends on a job for a living.

W. C. Wright, master mechanic, and James Powell, machinist, in Wright's Machine Shop, were my first subscribers. This is one of the best equipped shops to be found. Any kind of machinery can be made here, so when something is needed they don't have to wait for express or mail orders.

At Allred Plant, J. F. Plexico is overseer carding and spinning; J. E. McIntosh and D. E. Elmore, second hands in spinning; Fred Litton and C. L. Andrews, second hands in carding. Fred Byrd and Walter Laney, second hands in twisting; Linville Hollar, second hand in winding; Jack Dempsey, card grinder; Ernest Carter, section man in spooler room; Brady Hollar, section in picker room; W. B. Cline, office man; Harley Shuford, young brother of the president, working through; Henry Sherrill, overseer dyeing and polishing, has one of the most interesting departments in the Allred Plant. There is machinery here that was invented by the lamented Mr. Allred, and built on the spot. No one ever fails to give him credit for his work. "Mr. Allred built this machine." "Mr. Allred planted these roses." Mr. Allred had these trees out," etc. "Gone, but not forgotten" in the hearts of the people who worked for him.

Granite Cordage Mill has a genial overseer in Worth A. Yount; he is in charge of carding and braiding; C. B. Hicks, overseer; Spencer Watson, fixer, and L. R. Kirby, in braider department.

At No. 1, Charles Harrison and James Clay, second hands in spinning, and Marvin White, second hand in carding, are among the live wires. Mr. Starnes, overseer spinning, had just returned from a four weeks' visit to California "looking for Mae West" but never did find her! Mr. Clay is overseer carding.

At No. 2, J. H. Fagan is overseer carding and spinning on first shift, and W. H. Darby, overseer carding and spinning on second shift; Blain Myers and Henry Reid, second hands in carding; J. C. Miller and G. W. Richards, second hands in carding; Herman Cline, second hand in twisting; W. R. Reid, card grinder.

JEFFERSON, GA.

Interesting Monument in the City Square

How many people in the South—even in the State of Georgia, know that ether anesthesia was discovered at Jefferson, 93 years ago, by Dr. Crawford W. Long, a young practitioner only 27 years old? His first patient under ether was James M. Venerable for the removal of a tumor.

The story goes that when the patient was put to sleep "under a mulberry tree," his mountaineer friends stood around with shotguns ready to kill the doctor if the patient failed to wake! But he did wake up, and ether was given to medical science—one of the greatest boons to suffering humanity.

A magnificent monument, given by Dr. Lamartin Griffin Hardman in the name of his parents, Dr. and Mrs. B. J. Hardman, who were life-long friends of Dr. Crawford Long, stands as a historic reminder of the man who discovered ether.

At the Cotton Mill

Had a nice visit with the good people of the Jefferson Mills, Plant No. 1, where S. L. Stacks is the genial superintendent. Dobby goods and the prettiest suitings are made here—also glove flannels and duplex pocketing for bed springs. There are 256 looms and business seems to be good.

J. R. Clifton is overseer carding; S. L. Tipton, day overseer, and Ernest E. Shumate, second shift overseer spinning; C. E. Toney, overseer weaving, with Will Harris, second hand; A. E. Dyson, overseer the cloth room, is a real friend; thanks to him "Aunt Becky" can now dress up in some of the pretty suitings made there. He "dressed me up" once before, when he was cloth room overseer away down in Alabama. Many thanks, Mr. Dyson. His son, George Dyson, is second hand in the cloth room.

C. J. Stewart is supply man; T. E. Stewart, paymaster, and H. L. Garrison, master mechanic.

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

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AKRON BELTING CO., Akron, O. Sou. Branches, 209 Johnston Bldg., Charlotte, N. C.; 905 Woodside Bldg., Greenville, S. C.; 20 Adams Ave., Memphis, Tenn.

ALLIS-CHALMERS MFG. CO., Milwaukee, Wis. Sou. Sales Offices: Atlanta, Ga., Healey Bldg., Berrien Moore, Mgr.; Baltimore, Md., Lexington Bldg., A. T. Jacobson, Mgr.; Birmingham, Ala., Webb Crawford Bldg., John J. Greagan, Mgr.; Charlotte, N. C., Johnston Bldg., William Parker, Mgr.; Chattanooga, Tenn., Tennessee Electric Power Bldg., D. S. Kerr, Mgr.; Cincinnati, O., First National Bank Bldg., W. G. May, Mgr.; Dallas, Tex., Santa Fe Bldg., E. W. Burbank, Mgr.; Houston, Tex., Shell Bldg., K. P. Ribble, Mgr.; New Orleans, La., Canal Bank Bldg., F. W. Stevens, Mgr.; Richmond, Va., Electric Bldg., C. L. Crosby, Mgr.; St. Louis, Mo., Railway Exchange Bldg., C. L. Orth, Mgr.; San Antonio, Tex., Frost National Bank Bldg., Earl R. Hury, Mgr.; Tampa, Fla., 415 Hampton St., H. C. Flanagan, Mgr.; Tulsa, Okla., 18 North Guthrie St., D. M. McCargar, Mgr.; Washington, D. C., Southern Bldg., H. C. Hood, Mgr.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, 301 E. 7th St., Charlotte, N. C., Paul Haddock, Sou. Mgr.

AMERICAN ENKA CORP., 271 Church St., New York City. Sou. Rep., R. J. Mebane, Asheville, N. C.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Frank W. Johnson, Sou. Mgr., Box 1268, Charlotte, N. C. Sou. Reps., Robert E. Buck, Box 904, Greenville, S. C.; Harold T. Buck, Box 1953, Atlanta, Ga.; P. Dupree Johnson, Box 2197, Atlanta, Ga.; W. Chester Cobb, 408 Randall St., Greenville, S. C.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep., Textile Supply Co., Dallas, Tex.

ATLANTA BRUSH CO., Atlanta, Ga., T. C. Perkins, Pres. and Treas.; Howard R. Cook, Vice-Pres.; M. D. Tinney, Sec.; Geo. B. Snow, Rep. Carolinas and Virginia; William C. Perkins, Rep. Georgia and Alabama.

ATLANTA HARNESS & REED MFG. CO., Atlanta, Ga., A. P. Robert and G. P. Carmichael, Atlanta Office. Sou. Reps., Ala. and Ga., Barney R. Cole, Atlanta Office; Carolinas and Va., W. T. Smith, P. O. Box 349, Greenville, S. C.

BANCROFT BELTING CO., 145 High St., Boston, Mass. Sou. Agent, Ernest F. Culbreath, Ninety-Six, S. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

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BROWN & CO., D. P., Philadelphia, Pa. Sou. Rep., N. W. Pyle, Box 834, Charlotte, N. C.

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CAMPBELL & CO., JOHN, 75 Hudson St., New York City. Sou. Reps., M. L. Kirby, P. O. Box 432, West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

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DILLARD PAPER CO., Greensboro, N. C., Greenville, S. C. Sou. Reps., E. B. Spencer, Box 681, Charlotte, N. C.; M. C. Gunn, Box 215, Lynchburg, Va.

DRAKE CORPORATION, Norfolk, Va.

DRAPER CORPORATION, Hopedale, Mass. Sou. Rep., E. N. Darrin, Vice-Pres.; Sou. Offices and Warehouses, 242 Forsyth St., S. W., Atlanta, Ga., W. M. Mitchell, Spartanburg, S. C., Clare H Draper, Jr.

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EATON, PAUL B., 213 Johnston Bldg., Charlotte, N. C.

ECLIPSE TEXTILE DEVICES CO., Elmira, N. Y. Sou. Rep., John D. Lutes, P. O. Box 1551, Charlotte, N. C.

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Calvert Named Trustee of Peck Cotton Mills

Raleigh, N. C.—Following the filing of a petition in United States Court asking permission for reorganization and extension of time in which to meet debts, Judge Thomas H. Calvert of Raleigh has been appointed trustee to supervise the affairs of the Peck Manufacturing Company cotton mill of Warrenton. United States Judge I. M. Meekins designated Judge Calvert to take over the concern's operation. W. F. Ward is president of the company. The petition shows assets of $201,889 and liabilities of $89,137. Stockholders' equity, it is stated, amounts to $112,751 and is in jeopardy unless a reorganization is effected. One of the pressing debts against the corporation, the petition states, is a $30,110 note held by the Citizens Bank & Trust Co., Henderson.

L. C. Kinsey, for a number of years president and general manager of the Peck Manufacturing Company, has been bound over to the May term of the Warren County Superior Court, following a hearing on charges of embezzlement and fraudulent use of warehouse receipts on cotton. Bond was fixed at $15,000. The complaint against Kinsey was signed by the following directors of the Peck company: R. T. Watson, W. H. Dameron, V. F. Ward, G. W. Poindexter, W. N. Boyd and J. G. Ellis.

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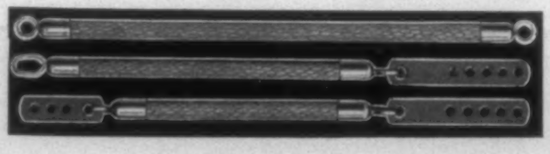

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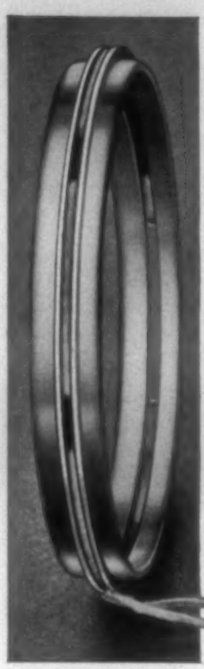

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